

PRELIMINARY SITE INVESTIGATION SUMMARY REPORT

**TECHNI-BRAZE, INC.
11845 BURKE STREET
SANTA FE SPRINGS, CA**

**PREPARED FOR
LINDBERG CORPORATION**

PROJECT NO. 91021.02

AUGUST 27, 1991

**MABBETT, CAPACCIO & ASSOCIATES, INC.
ENVIRONMENTAL CONSULTANTS AND ENGINEERS
5 ALFRED CIRCLE
BEDFORD, MA 01730
(617) 275-8050
(800) 877-8050**

COPYRIGHT 1991, MABBETT, CAPACCIO & ASSOCIATES, INC.

ACKNOWLEDGEMENT

The site assessment conducted at 11845 Burke Street, Santa Fe Springs, CA was completed in accordance with an established scope of work as defined in Mabbett, Capaccio & Associates, Inc. (MCA) Letter-Agreement dated June 28, 1991, and generally accepted site assessment standards of practice and procedures. The professional opinions and findings presented herein are based on the facts and information conveyed to or observed by MCA during completion of this project. These facts and observations are summarized in the attached report by MCA. If any of the information/facts provided to MCA and used in preparing this report are incorrect, incomplete or subject to change, MCA would wish to alter its opinion(s) accordingly. In addition, the professional opinions contained in this report are based solely on the laws, regulations, and technical data as known to MCA as of the date of this report and considered applicable to this project.

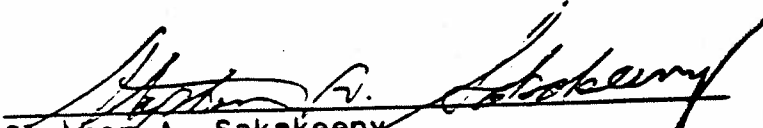
This report was prepared by the following Mabbett, Capaccio & Associates, Inc. personnel.

Mr. George L. Olson, Environmental Engineer

This report has been reviewed and approved by:

MABBETT, CAPACCIO & ASSOCIATES, INC.

BY:


Stephen A. Sakakeeny
Hydrogeologist-Environmental Scientist



Robert Salvatore Capaccio, P.E., CCHET
Vice President and Director of Engineering

- 1 -

Copyright 1991, Mabbett, Capaccio & Associates, Inc.

9121RSAM.021(13)

TABLE OF CONTENTS

<u>Description</u>	<u>Page</u>
I. <u>INTRODUCTION</u>	1
II. <u>SITE DESCRIPTION</u>	4
A. <u>Site Layout/History</u>	4
B. <u>Public Information Database Review</u>	6
III. <u>SUBSURFACE INVESTIGATION</u>	11
A. <u>Drilling, Soil Sampling and Monitoring Well Installation</u>	11
B. <u>Groundwater Sampling</u>	14
IV. <u>LABORATORY RESULTS AND DISCUSSION</u>	15
A. <u>TPH Results</u>	15
B. <u>VOC Results</u>	16
V. <u>CONCLUSIONS AND RECOMMENDATIONS</u>	18

LIST OF TABLES

<u>No.</u>	<u>Description</u>
Table 1	Summary of Techni-Braze Groundwater Screening Results
Table 2	Techni-Braze Laboratory Analytical Summary

LIST OF FIGURES

<u>No.</u>	<u>Description</u>
Figure 1	Site Location Plan
Figure 2	Site and Groundwater Well Location Plan

LIST OF APPENDICES

<u>No.</u>	<u>Description</u>
Appendix A	Clayton Environmental Report
Appendix B	Boring and Well Installation Logs
Appendix C	Field Activity Sheets
Appendix D	Laboratory Reports

I. INTRODUCTION

At the request of Lindberg Corporation (Lindberg), Mabbett, Capaccio & Associates, Inc. (MCA) completed a preliminary site investigation at Techni-Braze, Inc., 11845 Burke Street, Santa Fe Springs, CA. The Techni-Braze site is located approximately 2.3 miles northeast of the Route 5 and Route 605 intersection, and 1.3 miles east of the San Gabriel River (refer to Figure 1). The purpose of this investigation was to evaluate possible oil and hazardous material (OHM) contamination at the site associated with land use and process operations, as well as OHM contamination from upgradient off-site sources. The investigation was conducted in accordance with generally accepted standards of practice and procedures.

MCA site assessment activities included a review of the site history/land use; a site reconnaissance/visual evaluation; review of state and local spill/release databases and files; installation of four (4) groundwater monitoring wells and advancement of two (2) soil test borings on August 8, 1991, August 9, 1991 and August 12, 1991; and groundwater sampling of the four (4) site groundwater monitoring wells on August 13, 1991. The chemical investigation included field screening and laboratory analyses of selected soil and groundwater samples. Field activities were completed by MCA Environmental Engineer, George L. Olson.

Clayton Environmental Consultants, Inc. (Clayton), a Marsh & McLennan Company of Cypress, CA prepared a site assessment report entitled "Phase I Environmental Assessment at Techni-Braze, Inc., Santa Fe Springs, California" dated April 22, 1991. The report was prepared to evaluate potential environmental liabilities associated with past and present activities at or near the subject site. Clayton conducted a field survey, a review of public records, drive-by inspections of companies operating in the immediate vicinity, interviews with state and local agencies, qualitative evaluations of the potential presence of

Copyright 1991, Mabbett, Capaccio & Associates, Inc.

polychlorinated biphenyls (PCB) and asbestos containing materials at the subject site, and a site walkthrough on April 2, 1991. A subsurface investigation was not conducted. This report is enclosed as Appendix A.

MCA selected test boring split-spoon soil samples collected by MCA were analyzed for total petroleum hydrocarbons (TPH) by EPA Method 418.1, and for volatile organic compounds (VOC) by EPA Method 8010 or 8240. Groundwater samples collected from monitoring wells MCA-1, -2, and -3 were analyzed for TPH content by EPA Method 418.1, and MCA-1, -2, -3, and -4 were analyzed for VOCs by EPA Method 8240.

Soil sample TPH concentrations analyzed at B-1 and B-2 ranged from non-detectable, less than the 10 milligram per kilogram (mg/kg) detection limit, in samples collected at depth (25 to 27 feet below grade) to 4700 mg/kg, equivalent to parts per million (ppm), in boring B-2 soil sample SS-1 (0.5 to 2 feet below grade). VOC concentrations ranged from not detectable to 92,000 micrograms per kilogram (ug/kg) of tetrachloroethene (TETRA), equivalent to parts per billion (ppb), in boring B-2 soil sample SS-1. Tetrachloroethene is also known as perchloroethylene. TETRA was the only VOC compound detected in soil samples. Reference Appendix D for method detection limits.

Groundwater samples MCA-1, -2 and -3 did not indicate TPH contamination to the method detection limit of 0.5 ppm. Groundwater sample MCA-4 was not analyzed for TPH. Total VOC concentrations ranged from 27 ppb in MCA-2 to 7458 ppb in MCA-4. TETRA is the primary VOC groundwater contaminant having concentrations ranging from 27 ppb in MCA-2 to 7400 ppb in MCA-4. Other VOCs detected include; 1,1-Dichloroethene (1,1-DCE); 1,1,1-Trichloroethane (1,1,1-TCA); and Trichloroethene (TCE) which are likely to be biological degradation products and/or solvent impurities of TETRA.

Copyright 1991, Mabbett, Capaccio & Associates, Inc.

Depth to groundwater as measured at site in the monitoring wells is approximately 32 feet below grade. Groundwater being monitoring by site wells appears to be from the uppermost Gardena Aquifer.

MCA utilized two (2) subcontractors to perform site assessment related services. SCS Analytical Laboratory (SCS) of Long Beach, CA performed all laboratory analyses. Layne Environmental Services, Inc. of Long Beach, CA was responsible for the installation of four (4) groundwater monitoring wells and the advancement of two (2) soil test borings.

II. SITE DESCRIPTION

A. Site Layout/History

The approximately 55,210 square foot Techni-Braze property located at 11845 Burke Street, Santa Fe Springs, CA is currently occupied by a 24,321 square foot, two-story building used for office, storage, manufacturing, and distribution (refer to Figure 2).

Techni-Braze conducts alloy brazing and heat treatment of metal parts using seven (7) vacuum and five (5) induction furnaces. The property is owned by Ms. James V. Robinson and Ms. Patricia R. Jertberg, and is leased to the employee owned Techni-Braze, Inc. Except for the building, the majority of the property is paved for parking and distribution purposes. The south side of the property along Burke Street has approximately 1000 square feet of landscaping. Techni-Braze has been the sole occupant of the property since the building was constructed in 1966. According to Techni-Braze personnel, the warehouse portion of the building (east) was utilized for the machining and brazing of pneumatic tree trimming tool parts at one time during its operational lifetime. Prior to 1966, the area was used for agricultural purposes, presumable as a walnut grove according to Techni-Braze personnel.

According to the Clayton report, the site and surrounding area is zoned for heavy industrial use (classification M-2) by the City of Santa Fe Springs Planning and Development Department. As indicated by Figure 1, the site is located within the Whittier, CA Quadrangle of the U.S. Geological Survey (U.S.G.S.) Topographical Map at Universal Transverse Mercator coordinates 3758472N and 401751E, and polyconic projection coordinates of latitude $33^{\circ} 57' 47''$ and longitude $118^{\circ} 5' 10''$. According to the Clayton report the site is positioned within the flood plain Zone C (minimal flooding), on the northern

Copyright 1991, Mabbett, Capaccio & Associates, Inc.

boundary of the Santa Fe Springs Oil Field, and approximately 6 miles southwest of the Whittier, CA fault zone. Site topography indicates general surface water drainage to the west towards the Los Angeles County Flood Control Channel.

The building is serviced by municipal water and sewer. Municipal water is supplied by city water supply wells which draw water from aquifers deeper than the Gardina Aquifer. A city supply well (Well No. 1) is located approximately 500 feet south of the subject site. According to local officials, the well is approximately 900 feet deep. The property is also serviced by overhead and underground Southern California Edison, telephone and natural gas utility lines. The three (3) electrical transformers observed outside of the building on Techni-Braze property did not indicate evidence of leakage or stains.

Techni-Braze utilizes various compressed gases to perform heat treating, brazing and welding. Gas tanks and cylinders are stored throughout the facility with the majority being located exterior to the northwest corner of the building. Gases include hydrogen, argon, nitrogen, helium & argon, acetylene, oxygen, and compressed air.

The property is abutted by an unnamed alley/access road to the north with Cal-Western Paints (Pioneer) and Western Screw Products beyond to Slauson Avenue. Property owned by Stain Master borders to the east with commercial/industrial property beyond. Burke Street adjoins to the south with commercial and industrial property beyond. The Los Angeles County Flood Control Channel provides the property boundary to the west with a vacant warehouse-type building beyond to Dice Road.

Wastes generated by current Techni-Braze on-site operations include wastewater from the Bright Dip (hydrochloric acid solution) part cleaning line (quantity generated unknown),

Copyright 1991, Mabbett, Capaccio & Associates, Inc.

vacuum and turbo waste oils (4-55 gal on drums are currently on-site), waste solvents (TETRA and acetone), and sweeping compound. All wastewater generated is neutralized with soda ash, discharged to an underground clarifier tank and subsequently to the municipal sewerage system. Waste oil containers are stored exterior to the northeast corner of the building under cover, on wooden pallets, and surrounded by oil absorbent booms. Minor oil staining of concrete and asphalt was observed in the waste oil storage area. According to Techni-Braze personnel, all hazardous waste and waste oils are properly manifested, transported and disposed of at licensed treatment, storage and disposal facilities (TSDF).

Other chemicals are used/stored on-site in small quantities including paints, dispersion pump fluid, motor oils, cleaning compounds, adhesives, alloy brazing powders, blasting beads, kerosene, cutting and lubing oils, paint thinner, phosphoric acid, non-contact cooling water treatment chemicals (e.g., biocides), lubricating grease, ensis oil, silver brazing and ultra flux compounds, and potassium fluoride.

Non-contact cooling water is supplied for furnace operations by a closed loop system. The non-contact cooling water system consists of a concrete water recirculation tank, cooling tower and pumps, and above ground and sub-floor conveyance piping. Water lost to evaporation is replaced as needed with city supplied water.

Reference the Clayton report (Appendix A) for additional site history and descriptive information.

B. Public Information Database Review

MCA personnel reviewed Santa Fe Springs Fire Department, Fire and Environmental Protection Division files on August 7, 1991, and selected and reviewed California Environmental Protection

Copyright 1991, Mabbett, Capaccio & Associates, Inc.

Agency (EPA) identified site files on August 12, 1991 to supplement the initial public information review conducted by Clayton (refer to Appendix A).

Several companies in close proximity to the subject site were identified during the Fire Department file review as having bulk chemical storage and/or underground storage tanks (UST).

Morton Chemical, a division of Morton Thiokol, Inc., located at 11733 East Slauson Avenue approximately 750 feet northwest and potentially upgradient of Techni-Braze, produces formulated adhesives for food packaging, laminating and industrial adhesives markets. Morton Chemical conducts blending operations with chemicals such as polyester, epoxy, polyurethane resins, and rubbers in various solvents which are packaged for off-site shipment. Morton chemical stores a wide variety of chemicals in drums including chlorinated solvents, however, Tetrachloroethene was not noted. Morton Chemical has four (4) aboveground, 6,000 gallon stainless steel storage tanks for the storage of Latex polymers and reportedly does not have any USTs.

Cal-Western Paints (or Pioneer Paints), located less than 100 feet north and upgradient of Techni-Braze at 11748 East Slauson Avenue, produces and distributes paints and painting products. Cal-Western has considerable bulk storage in 55 gallon drums, aboveground tanks and USTs. Fire Department records did not clearly differentiate between aboveground and underground storage or container type. The majority of the chemicals stored included mineral spirits/paint thinner, alkyd resins, and alcohols. Chlorinated solvents were not identified.

Western Screw Products, Inc., located less than 100 feet north and upgradient of Techni-Braze at 11770 East Slauson Avenue, conducts machining operations for the production of metal

Copyright 1991, Mabbett, Capaccio & Associates, Inc.

fasteners (i.e., screws, etc.). Western Screw stores petroleum hydrocarbon based cutting and hydraulic fluid, and diesel fuel, in 55 gallon drums and aboveground storage tanks. Chlorinated solvents/hydrocarbons were not identified. On May 29, 1981, Western Screw received a Notice of Violation and Order to Comply from the County of Los Angeles, Department of County Engineer, Sanitation Division for disposing of oil and grinding sludge on a vacant unpaved lot located immediately east of Western Screw. Western Screw was directed to cease the operation, which was apparently used to suppress dust, and to remove deposits and affected soils for proper disposal. No other pertinent information was available.

Daniels Tire Service (Daniels) located approximately 1,000 feet east-northeast of Techni-Braze at 11850 East Slauson Avenue, is an automobile and truck service center for tire repair and replacement. Daniels owns 3-12,000 gallon USTs used for the storage of diesel fuel and unleaded regular gasoline. These tanks are located near the corner of Slauson Avenue and Sorenson Avenue. No other pertinent information was available.

MCA personnel provided the CA EPA with a list of eight (8) companies, identified by MCA using the BBL Environmental Records Search information available in Appendix D of the Clayton report (refer to Appendix A), for a file review at CA EPA's Burbank, CA office. The CA EPA had files on four of the eight requested sites which included Cal-Western, Western Screw Products, Pilot Chemical (located at 11750 Burke Street approximately 750 feet southwest of Techni-Braze), and West Bent Bolt (located at 8623 Dice Street approximately 500 feet southwest of Techni-Braze) in Santa Fe Springs, CA. Pilot Chemical and West Bent Bolt are located hydrologically downgradient of Techni-Braze, and therefore are unlikely to adversely impact subsurface conditions at the subject site. According to available file information, chlorinated

Copyright 1991, Mabbett, Capaccio & Associates, Inc.

hydrocarbons (CHCs) such as TETRA were not released at these sites. Cal-Western and Western Screw are located upgradient, less than 100 feet north of Techni-Braze.

The CA EPA file on Cal Western indicated that the site has been operational since 1968 and that four (4) USTs exist on-site. Specific information regarding the USTs was not present. The file contained information regarding a preliminary assessment dated 1984 performed by the CA EPA which indicated solvent waste generation, however no incidents of OHM releases had been observed or documented. The CA EPA recommended No Further Action (NFA).

The CA EPA file regarding Western Screw recounted the 1981 Notice of Violation (NOV) relative to oil and grinding sludge disposal on a vacant property. The file also indicated that an oil-like material had spread into the alley and that several discarded drums were noted on the vacant lot. The file did not contain information regarding drum contents or the quantity of contaminated soil and sludge removed. In July 1988, the CA Toxic Substances Control Division determined that an NFA recommendation was appropriate for the site.

Several other locations in the vicinity of the subject property had file information on chemical storage, however these locations are situated hydrologically downgradient of the Techni-Braze site and are not anticipated to have a significant adverse impact on subject site environmental conditions.

Of the sites reviewed, it is Cal-Western Paint and Western Screw Products which are of most concern regarding potential contaminant migration from off-site sources onto the Techni-Braze property. Files did not indicate soil/groundwater sampling at these sites which would confirm or eliminate them as potential upgradient sources, therefore, the

Copyright 1991, Mabbett, Capaccio & Associates, Inc.

likelihood of extent of contaminant contribution from these sites to Techni-Braze is not known at this time.

Copyright 1991, Mabbett, Capaccio & Associates, Inc.

Lindberg Corporation
91021.02

August 1991
Page 10 of 18
9121R8AM.021(13)

III. SUBSURFACE INVESTIGATION

A. Drilling, Soil Sampling and Monitoring Well Installation

On August 8, 9, and 12, 1991, MCA Environmental Engineer Mr. George L. Olson observed the advancement of two (2) subsurface test borings (B-1 and B-2) and the installation of four (4) groundwater monitoring wells (MCA-1, -2, -3 & -4) at Techni-Braze, 11845 Burke Street, Santa Fe Springs, CA (refer to Figure 2). The borings/wells were installed to provide soil/groundwater quality data adjacent to suspected release sources (i.e., tetrachloroethene aboveground storage tank and degreaser, and outside waste storage area) as well as to provide information relative to potential contamination from hydrologically upgradient sources and downgradient impacts.

The borings were advanced using a truck mounted, 4.25 inch I.D. hollow stem auger rig. Borings B-1 and B-2 were advanced 27 feet below grade with split-spoon samples collected at two (2) foot intervals to approximately 14 feet below grade. Samples were then collected at the 20 to 22 foot and 25 to 27 foot below grade depth intervals. Borings B-1 and B-2 were advanced adjacent to the chemical storage area (primarily acetone and oils), and the TETRA 200 gallon aboveground storage tank (AST) and vapor degreaser, respectively. Monitoring wells MCA-1, -2, -3, and -4 were advanced to 60 feet, 40 feet, 40 feet, and 45 feet below grade, respectively. Groundwater monitoring wells were set at approximately 45 feet in MCA-1, 39.25 feet in MCA-2, 39.3 feet in MCA-3 and 44.075 feet in MCA-4, as measured from the top of PVC casing to the bottom. Wells were installed at these depths to monitor the upper most portion of the first aquifer encountered. Reference Appendix B for Boring and Monitoring Well Installation Logs.

Copyright 1991, Mabbett, Capaccio & Associates, Inc.

All monitoring wells are constructed with 10 feet of 2-inch inside diameter, 0.010-inch slotted screen, schedule 40 PVC within the groundwater depth interval to be monitored. The annular space between the test boring and well screen was backfilled with silica sand to prevent well clogging and enhance well production. A two (2) foot clay seal of bentonite pellets was backfilled above the silica sand pack to isolate the groundwater depth interval intended for monitoring. The remainder of the annular space around the well was grouted to within one foot of the ground surface. A watertight steel casing was placed over each well and set in concrete to protect the PVC well and prevent surface water run-off intrusion.

In the course of installing the wells, soil samples were collected using a 2-foot long split-spoon sampler. Samples were collected at approximately 5 foot intervals to obtain representative soil samples from each well. All samples were collected by advancing a 2-inch O.D., 1.375 inch I.D., split-spoon sampler by Standard Penetration Test Method, driven by 140-pound hammer over a 30-inch vertical drop. The sampler was brought to the surface, split apart and a composite sample was collected. The composite soil samples were obtained by cross-sectioning the split-spoon core sample along its length. Between samples, the split-spoon was decontaminated with an Alconox detergent wash, methanol rinse and a final distilled water rinse to minimize the potential of cross contamination. Auger flights, rods, casing and associated drilling equipment were decontaminated prior to site activities and between wells using high pressure steam.

General classification of soil as observed in split-spoon samples indicated dense moderately elastic silty clay to a depth of approximately 15 feet followed by lenses of varying proportions of sand, silt and clay. Bedrock was not encountered and is not anticipated for several hundred feet

Copyright 1991, Mabbett, Capaccio & Associates, Inc.

based on available USGS information and the Log of City Water Supply Well No. 1 (Log No. 1633B) located approximately 500 feet south of the subject site.

An HNu Systems, Inc., photoionization detector Model HW-101 (HNu) was used by MCA personnel to screen soil samples for total VOCs during soil boring advancement/well installation activities at the site. The HNu was used to qualitatively identify total VOCs with ionization potentials between 0 and 10.2 electron volts (eV). The instrument was calibrated to benzene. An isobutylene standard and zero grade air were used to calibrate the HNu before and after each use. Drager length-of-stain colorimetric detector tubes for TPH, TETRA and Acetone were also used to screen soil vapor headspaces.

Sample headspace vapor screening was completed by MCA personnel by filling a sample container half-full with sample, covering the jar with aluminum foil and shaking it for one minute. The sample was allowed to equilibrate to ambient temperature, approximately 80°F, and was then analyzed by piercing the foil with the HNu's stainless steel probe and/or the glass Drager tube. Refer to Appendix B and C for HNu screening results.

Four (4) of sixteen (16) soil samples collected were analyzed by SCS for TPH by EPA Method 418.1. Six (6) of sixteen (16) soil samples collected were analyzed by SCS for VOCs by EPA Method 8010 or 8240. Samples were selected based on field data including vapor headspace screening and field observations by MCA personnel. Laboratory reports are incorporated in Appendix D.

It should be noted that total VOC screening results are qualitative only. Because of this and the need to expedite analytical information, selected soil samples and groundwater samples from all on-site wells were shipped by overnight mail

Copyright 1991, Mabbett, Capaccio & Associates, Inc.

to MCA offices for semi-quantitative VOC analysis using portable gas chromatograph (GC). Analysis was done using standards of known VOC compounds and concentrations allowing VOC identification and semi-quantitation. Results are summarized in Table 1.

B. Groundwater Sampling

On August 13, 1991, groundwater samples were collected by MCA personnel from monitoring wells MCA-1, -2, -3 and -4. Prior to sampling, each well was purged by removing a minimum of 3 volumes of standing well water using a dedicated disposable teflon bailer. The temperature, pH and conductivity of the groundwater were measured by MCA personnel after removing each well volume of water. Similar readings between volumes were used as an indication of an adequately purged well. If temperature, pH and conductivity measurements did not stabilize after removing the third well volume, purging was continued until consistent readings were attained. Table 1 summarizes the temperature, pH and conductivity of groundwater measured at the site.

After purging, each well was allowed to recharge to at least 90% of its static water level before sampling. Groundwater was sampled using the dedicated teflon bailer to prevent cross contamination between wells.

Depth to groundwater across the site as measured on August 13, 1991 was approximately 32 feet below grade. Based on information obtained through file reviews and discussions with regulatory personnel, it is anticipated that groundwater from the Gardena Aquifer is being monitored on-site and that several other aquifers are present down to 900 feet below grade. Only the upper most aquifer was evaluated during this study.

Copyright 1991, Mabbett, Capaccio & Associates, Inc.

IV. LABORATORY RESULTS AND DISCUSSION

Selected soil and groundwater samples were analyzed by SCS, a state certified commercial laboratory located in Longbeach, CA. The following analyses were performed on selected samples during the MCA August 8 - 13, 1991 sampling activities: TPH by EPA Method 418.1 and VOC by EPA Method 8010 or 8240. Results are summarized in Table 2. Complete laboratory reports generated during MCA sampling activities specify analytical method detection limits and are included in Appendix D.

A. TPH Results

Four (4) soil samples from the two (2) borings B-1 and B-2 were analyzed for TPH. The samples analyzed included the initial split-spoon sample B-1 SS-1 and B-2 SS-1, both anticipated to be "worst case" TPH contaminant samples, and a sample at maximum boring depth (25 feet to 27 feet below grade) B-1 SS-6 and B-2 SS-7. Sample B-1 SS-1 was a composite of the 0.5 to 2.5 foot depth interval and indicated 59 ppm of TPH. Sample B-2 SS-1 was a composite sample of the 0.5 to 2.0 foot depth interval split-spoon soil sample and indicated 4700 ppm of TPH. Soil samples collected at depth, 25 feet to 27 feet below grade indicated no TPH contamination to the detection limit of 10 ppm. Based on these results, the background/naturally occurring TPH concentration is assumed to be less than the detection limit of 10 ppm. Groundwater was not encountered in these borings. It is located approximately 32 feet below grade.

On August 13, 1991, subsequent to the installation of monitoring wells MCA -1, -2, -3, and -4, MCA personnel collected groundwater samples. All groundwater samples indicated no TPH contamination to the detection limit of 0.5 ppm.

Copyright 1991, Mabbett, Capaccio & Associates, Inc.

Based on the soil groundwater quality and field observations, TPH contamination, with the exception of CHC compounds, appears to be limited to soils near ground level.

B. VOC Results

VOC analysis by EPA Method 8010 or 8240 was conducted on select soil and all groundwater samples during the August 8 - 13, 1991 MCA sampling activities. EPA Method 8240 was conducted on soil samples collected from B-1 and on all groundwater samples. EPA Method 8010 was utilized for soil samples collected from B-2.

Laboratory results of the soil sample collected from boring B-1, located adjacent to the chemical storage area, at the 0.5 to 2.5 depth interval indicated 200 ppb of TETRA, less than 10 ppb of TCE and less than 50 ppb of Acetone. Less than values indicate that the contaminant was not detected to the detection limit specified (i.e., 50 ppb of Acetone). Laboratory analysis of the soil samples B-1 SS-4 (12 to 14 feet below grade) and B-1 SS-6 (25 to 27 feet) did not detect TETRA, TCE or Acetone to their detection limits of 10 ppb, 10 ppb and 50 ppb, respectively.

Laboratory analysis of the soil sample collected from boring B-2, located adjacent to the TETRA aboveground storage tank and vapor degreaser, at the 0.5 to 2.0 foot depth interval indicated 92,000 ppb of TETRA, no other compounds were detected. Lab analysis of B-2 SS-4 (10 to 12 feet below grade) and B-2 SS-7 (25 to 27 feet) indicated no contamination to the detection limits of 5 ppb each.

Laboratory analysis of groundwater from monitoring wells MCA-1, -2, -3, and -4 indicated the following results: MCA-1 indicated 2200 ppb of TETRA and 100 ppb of TCE; MCA-2 indicated 27 ppb of TETRA; MCA-3 indicated 1300 ppb of TETRA,

Copyright 1991, Mabbett, Capaccio & Associates, Inc.

12 ppb of TCE, 14 ppb of 1,1,1-TCA, and 22 ppb of 1,1-DCE; and MCA-4 indicated 7400 ppb of TETRA, 13 ppb of TCE, 17 ppb of 1,1,1-TCA, and 28 ppb of 1,1-DCE. Reference Appendix C for MCA soil screening results and Table 1 for MCA GC groundwater screening results.

The US EPA Drinking Water Standards for these compounds are as follows:

Tetrachloroethene	5 ppb
Trichloroethene	5 ppb
1,1,1-Trichloroethane	200 ppb
1,1-Dichloroethene	7 ppb

Based on the proximity to a city water supply well of approximately 500 feet south and hydrologically downgradient of Techni-Braze, and CA EPA and Water Control Board policies, it is anticipated that groundwater treatment will be necessary to remediate identified on-site TETRA contamination. The clean-up levels imposed by the regulatory agency would likely be based on these drinking water standards or could possibly be set lower at clean-up goals which approximate the detection limits of EPA drinking water Method 524.1.

Additional study is required however, before a more definitive remediation plan can be defined.

Specific determination of on-site groundwater flow direction via the completion of a groundwater monitoring well evaluation survey will be required. The survey is currently on-hold pending decisions by Lindberg Corporation personnel.

Copyright 1991, Mabbett, Capaccio & Associates, Inc.

V. CONCLUSIONS AND RECOMMENDATIONS

Based on site history, soil and groundwater quality, hydrogeologic conditions defined beneath the Techni-Braze site, and review of available data, a release of tetrachloroethene (TETRA) from storage and/or the vapor degreaser operations, to the soil and the underlying site groundwater has occurred. The release was likely associated with a spill(s) or leak(s) from one or both operations.

Based on site assessment activities conducted to date, the TETRA release is believed to be the only significant OHM release to the environment at the site. Contaminant levels are highest at MCA-4, indicating Techni-Braze's on-site degreaser solvent use as the likely source of the most significant release, as initially suspected. Contamination was also present at MCA-3 located downgradient of the facility along Burke Street indicating that contaminants may have also migrated off-site. Contributing upgradient, off-site sources not associated with Techni-Braze operations were suspected, based on the high levels of contaminants present at upgradient wells MCA-1. However, according to Lindberg personnel, degreasing operations were conducted in this area by Techni-Braze at one time. Upgradient sources may still be present but their contribution to contamination on-site cannot be confirmed at this time.

Based on groundwater concentrations, anticipated groundwater flow direction and local geology, the existence of a Santa Fe Springs, CA water supply well located approximately 500 feet hydrologically downgradient of the site, and discussions with various CA EPA and Regional Water Quality Control Board personnel; additional subsurface investigation as well as groundwater treatment will likely be required at the subject site. A plan of action should be developed and coordinated with CA EPA regulatory personnel to complete the required follow-up investigation and likely remediation activities.

Copyright 1991, Mabbett, Capaccio & Associates, Inc.

TABLE 1

SUMMARY OF TECHNI-BRAZE GROUNDWATER SCREENING RESULTS¹

Well Location (Well Volume)	Cumulative Purge Volume (Gallons)	Temperature (°C)	pH ¹ (s.u.)	Specific Conduc- tance ^{1,2}	VOC ³ (ppb)
MCA-1 (1.86 gallons)	1.9	22.6	7.03	1170	NA
	3.8	22.5	7.30	1140	NA
	5.7	22.5	7.37	1160	TETRA 2140 TCE 125
MCA-2 (1.05 gallons)	1.1	20.0	7.95	780	NA
	2.2	20.2	7.81	780	NA
	3.3	20.2	7.79	790	TETRA 53 TCE ND
MCA-3 (1.19 gallons)	1.2	22.7	7.86	1410	NA
	2.4	22.6	7.76	1370	NA
	3.6	22.8	7.71	1350	TETRA 1560 TCE 25
MCA-4 (2.0 gallons)	2.0	22.8	7.88	1800	NA
	4.0	22.5	7.82	1720	NA
	6.0	22.4	7.79	1710	TETRA 2560 TCE ND

NOTES:

$^{\circ}\text{C}$ = Degrees Celsius
 $\mu\text{mho}/\text{cm}$ = micro mho per centimeter, equivalent to ohm^{-1} and cm^{-1} or micro siemens/cm.
VOC = Volatile Organic Compounds.
TETRA = Tetrachloroethene (Perchloroethylene).
TCE = Trichloroethene.
ND = Not Detected.

1. Conductivity and pH meters are calibrated prior and after use.
2. Conductivity measurements are corrected to 25°C . Groundwater sample collected August 13, 1991. VOC sample collected after final purge in volume in each well.
3. Screening conducted by MCA using a Photovac, Inc. 10S10 gas chromatograph. Compound identification and quantification was conducted using a 50 ppb standard. Results are semi-quantitative.

TABLE 2

TECHNI-BRAZE LABORATORY ANALYTICAL SUMMARY

Sample Location	Depth Interval (ft)	Medium	TPH (ppm)	TETRA (ppb)	TCE (ppb)	1,1,1-TCA (ppb)	1,1-DCE (ppb)
MCA-1	NA	Groundwater	LT 0.5	2200	100	ND	ND
MCA-2	NA	Groundwater	LT 0.5	27	ND	ND	ND
MCA-3	NA	Groundwater	LT 0.5	1300	12	14	22
MCA-4	NA	Groundwater	LT 0.5	7400	13	17	28
B-1 SS-1	0.5-2.5	Soil	59	200	ND	ND	ND
B-1 SS-4	12-14	Soil	NA	ND	ND	ND	ND
B-1 SS-6	25-27	Soil	ND	ND	ND	ND	ND
B-2 SS-1	0.5-2	Soil	4700	92000	ND	ND	ND
B-2 SS-4	10-12	Soil	NA	ND	ND	ND	ND
B-2 SS-7	25-27	Soil	ND	ND	ND	ND	ND

NOTES:

TPH

ppm

ppb

TETRA

TCE

1,1,1-TCA

1,1-DCE

B

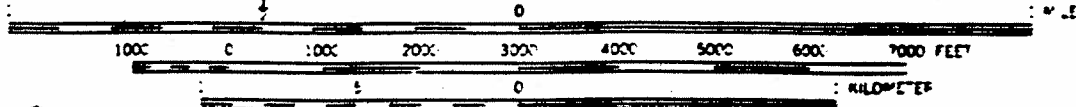
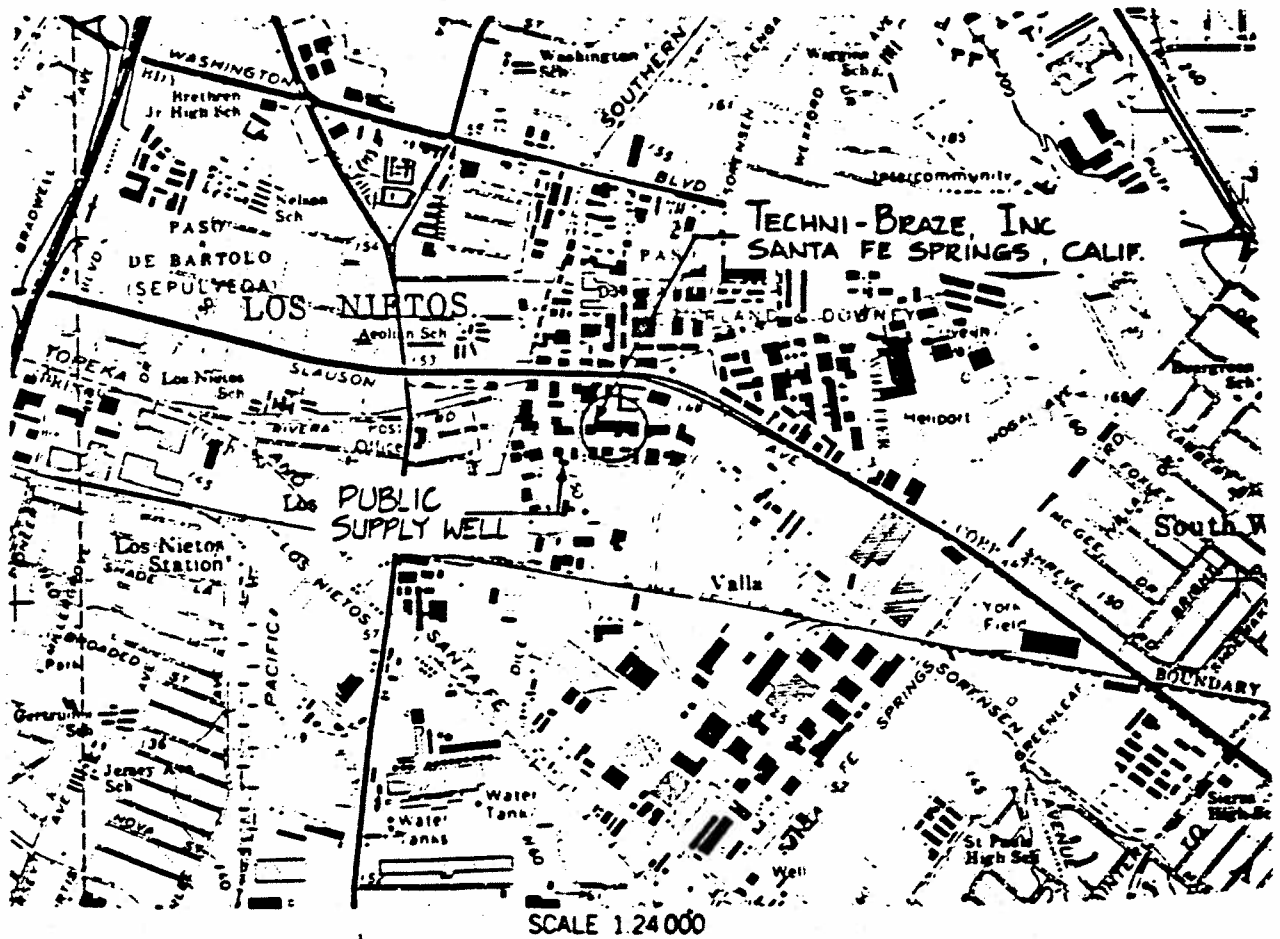
MCA-#

NA

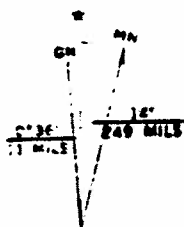
ND

LT

Total Petroleum Hydrocarbon Analysis by EPA Method 418.1.
 parts per million, equivalent to milligrams per liter (mg/L).
 parts per billion, equivalent to micrograms per liter (ug/L).
 Tetrachloroethene.
 Trichloroethene.
 1,1,1-Trichloroethane.
 1,1-Dichloroethene.
 Test Boring.
 Monitoring Well Location.
 Not Applicable or Not Analyzed.
 Not Detected (refer to Laboratory Reports, Appendix D for method detection limits).
 Less Than.



CONTOUR INTERVAL 20 FEET
 DOTTED LINES REPRESENT 5-FOOT CONTOURS
 NATIONAL GEODETIC VERTICAL DATUM OF 1929



UTM GRID AND 1981 MAGNETIC NORTH
 DECLINATION AT CENTER OF SHEET

WHITTIER QUADRANGLE
 CALIFORNIA
 7.5 MINUTE SERIES (TOPOGRAPHIC)



QUADRANGLE LOCATION

LINDBERG CORPORATION
 WESTWOOD, MASS.



**MABBETT, CAPACCIO
 & ASSOCIATES, INC.**
 CONSULTANTS AND ENGINEERS
 5 Alfred Circle Bedford, Massachusetts 01730

**FIGURE 1
 SITE LOCATION PLAN**

SCALE: AS NOTED

DR BY: HSW

DATE: 8/27/91

AP BY: GLO

DWG NO.

1

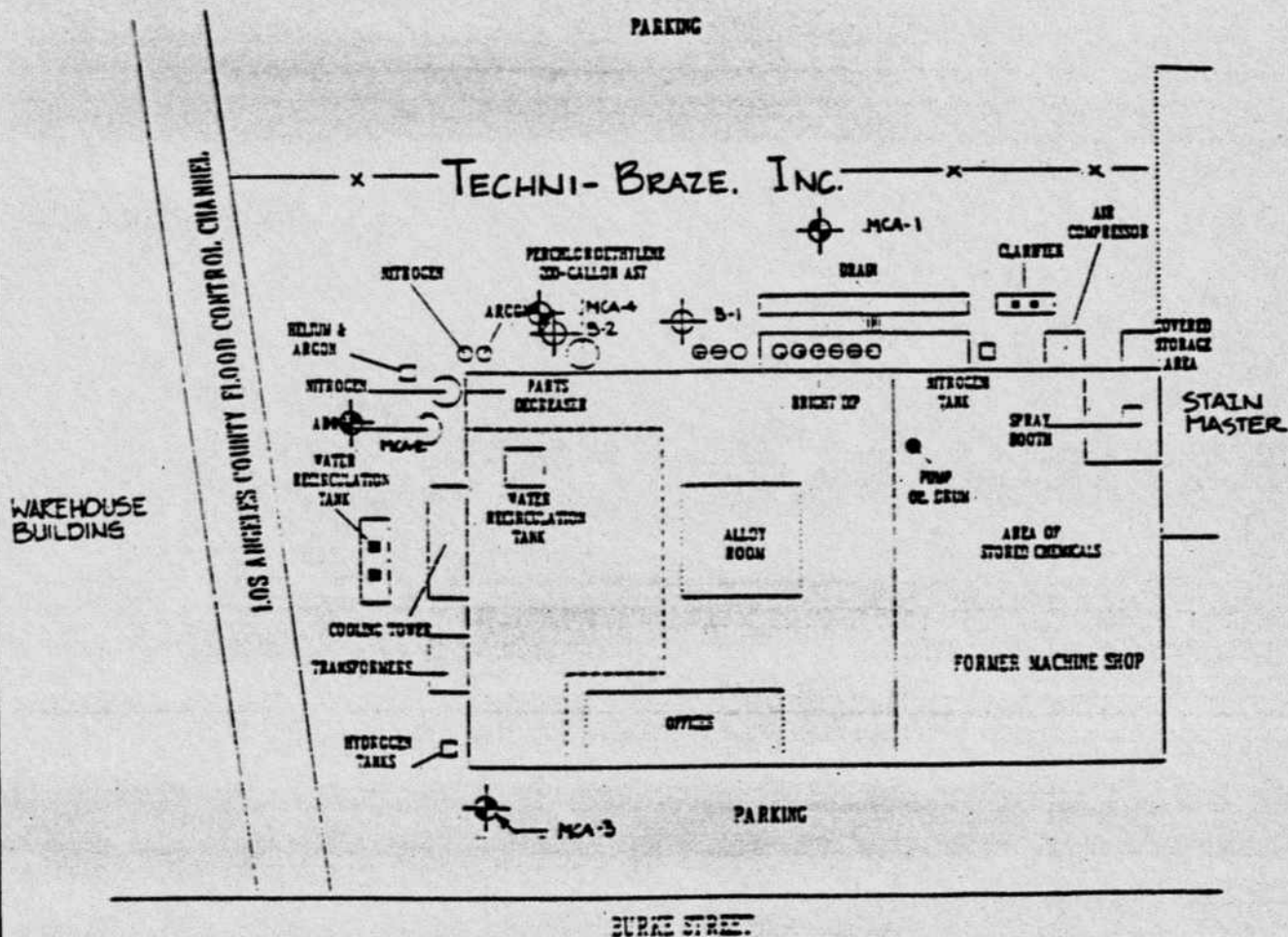
PROJ NO.

91021.02

CAL-WESTERN

WESTERN SCREW
PRODUCTS

(FORMER
DISPOSAL
AREA)



NOTE:

THIS PLAN WAS TAKEN FROM "SITE LOCATION MAP"
PREPARED FOR TECHNI-BRAZE, INC. SANTA FE
SPRINGS, CALIFORNIA DATED APRIL 1991, PREPARED
BY CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

LEGEND:

- CHEMICAL DRUM, VARIOUS SIZE
- "SIX-PACK" MOBILE TANK RACK
- ABOVEGROUND STORAGE TANK
- ⊕ MONITORING WELL
- ⊙ SOIL BORING



LINDBERG CORPORATION

WESTWOOD, MASS.



MABBETT, CAPACCIO
& ASSOCIATES, INC.

CONSULTANTS AND ENGINEERS

5 Alfred Circle Bedford, Massachusetts 01730

FIGURE 2
BORING/WELL LOCATIONS

SCALE: NOT TO SCALE

DR BY: HSW/WES

DATE: 8/15/91

AP BY: [Signature]

DWG NO.

2

PROJ NO.

91021.02

APPENDIX A

CLAYTON ENVIRONMENTAL REPORTS

Pacific Operations
Los Angeles

5785 Corporate Avenue
Suite 130
Cypress, CA 90630
(714) 229-4806
Fax (714) 229-4805

Clayton
ENVIRONMENTAL
CONSULTANTS

9 MF-
DO NOT REUSE
Project No. 91021
Project Name LHT
CC: CLAYTON

Phase I Environmental Assessment
at

Techni-Braze, Inc.
Santa Fe Springs, California
for

Techni-Braze, Inc.
Santa Fe Springs, California

Clayton Project No. 34493.00

April 22, 1991

CONTENTS

<u>Section</u>	<u>Page</u>
1.0 <u>INTRODUCTION</u>	1
2.0 <u>FINDINGS AND RECOMMENDATIONS</u>	2
3.0 <u>PROPERTY DESCRIPTION</u>	4
3.1 PRESENT CONDITIONS	4
3.2 SITE HISTORY	4
3.3 GENERAL GEOLOGY AND TOPOGRAPHY	5
4.0 <u>ENVIRONMENTAL FINDINGS</u>	7
4.1 ONSITE FINDINGS	7
4.2 OFFSITE FINDINGS	13

Appendices

- A FIGURES
- B PHOTOGRAPHIC RECORD
- C AGENCY AND OTHER INFORMATION
- D BBL RECORD SEARCH

1.0 INTRODUCTION

Mr. Gregory Naiman, Controller of Techni-Braze, Inc., retained Clayton Environmental Consultants, Inc. to conduct a Phase I environmental assessment of the Techni-Braze facility at 11845 Burke Street in Santa Fe Springs, California.

The purpose of our Phase I assessment was to evaluate past, current, and potential environmental liabilities associated with present and previous operations on or near the site. Clayton's assessment included (1) a field survey, (2) a review of public records, (3) drive-by inspections of companies operating in the immediate vicinity, (4) interviews with local and state agencies, (5) a review of available regional hydrogeologic information, (6) an evaluation of the potential for soil and groundwater contamination (as a result of leaking underground storage tanks, spills, pits, ponds, and lagoons), (7) an assessment of the possible presence of polychlorinated biphenyls (PCBs), and (8) an assessment of the potential for asbestos-containing materials (ACM) in the building as observed in readily-accessible locations.

Ms. Shannon Gillespie, Environmental Consultant with Clayton, conducted the site walkthrough on April 2, 1991. She was accompanied by Mr. Naiman.

In addition, Clayton inspected records at (or gathered data from) the following agencies, regulatory bodies, utility companies, and college archives:

- California Department of Water Resources
- California Department of Conservation, Division of Mines and Geology
- Los Angeles County Department of Public Works
- Los Angeles County Public Health Investigation Department
- City of Santa Fe Springs Fire Department
- City of Santa Fe Springs Planning and Development Department
- City of Santa Fe Springs Building and Safety Department
- Santa Fe Springs City Hall
- U.S. Department of Agriculture, Soil Conservation Service
- U.S. Environmental Protection Agency (EPA)
- U.S. Geological Survey (USGS)
- Whittier College Fairchild Aerial Photography Collection

- Southern California Edison
- BBL Record Search

Clayton understands that Techni-Braze requested this assessment in keeping with due diligence requirements, under the Superfund Amendments and Reauthorization Act (SARA) of 1986. The assessment was performed in accordance with the terms and conditions described in Clayton's Proposal No. 91-SEE-034, dated March 15, 1991. Written authorization to proceed with the assessment was received on March 19, 1991.

2.0 FINDINGS AND RECOMMENDATIONS

Based on our limited investigation, which included a site visit, records search, personal interviews with site managers, and review of regional geologic information, Clayton presents the following findings and recommendations:

- The onsite inspection did not reveal the presence of underground storage tanks, sumps, stained surficial soils, or unseasonably dead vegetation.
- Miscellaneous chemicals are stored and used onsite. All chemicals should be stored in covered, bermed, and secured areas away from flame and heat. An absorbent material should be readily available to clean up spills that may occur. Material safety data sheets (MSDS) are available in the main office for all chemicals used onsite.
- Secure the extra propane tanks to fuel the forklifts in an upright position to avoid accidental tipping.
- Clayton recommends the installation of a berm around the perchloroethylene aboveground storage tank (AST) and the vapor degreaser to contain any leaks or spills.
- Fluorescent light fixtures are used throughout the facility. Handle and dispose of fluorescent light ballasts and tubes as hazardous waste, if the site undergoes remodeling and the fixtures are removed.
- According to Southern California Edison (SCE), the three transformers that they own on the west side of the building should not contain PCBs.
- There are many sites within 1 mile of the property that are listed with environmental agencies as having environmental problems. Clayton recommends a review of the files on listed sites that are located within at least 1/4 mile, and are upgradient (north) of the subject property to assess the potential threat of environmental impact on the subject site.
- Suspect asbestos-containing building materials (ACBM), in the form of floor tile, baseboard, and acoustical ceiling panels, were found throughout the facility. We

recommend a bulk asbestos building assessment, including sampling and analysis to confirm the absence or presence of asbestos, if the site undergoes remodeling or demolition that would disturb the suspect ACBM.

- We recommended the construction of a higher berm along the flood control channel. This would minimize the potential for any accidental chemical spills onsite to readily enter the adjacent flood control channel.

3.0 PROPERTY DESCRIPTION

3.1 PRESENT CONDITIONS

Techni-Braze leases the 24,000 square foot building at 11845 Burke Street in Santa Fe Springs, California. The building is divided into two sections, a 9,600 square foot area formerly used as a machine shop (presently a miscellaneous storage area), and a 14,400 square foot production and office area.

Techni-Braze performs brazing and heat treatment of metal parts and alloy-covered metal parts using vacuum furnaces. The general site location and topography are shown in Figure 1 of Appendix A. The parcel location, general orientation, and size of the subject site are shown in Figure 2 of Appendix A. Photographs taken during the onsite inspection are included as Appendix B.

The area surrounding the site consists primarily of commercial and industrial property. The subject property is bordered on the south by Burke Street and a vacant building, on the east by an industrial/warehouse-type building, on the west by a Los Angeles County flood control channel and an industrial/warehouse-type building, and on the north by Pioneer Paints.

3.2 SITE HISTORY

The City of Santa Fe Springs Planning and Development Department zoned this area M-2, which allows for heavy industrial use. Records from the City of Santa Fe Springs Building and Safety Department indicate that the original building was constructed in 1966. Techni-Braze has been the only occupant since construction. Prior to 1966, the site was undeveloped.

Clayton reviewed the Fairchild Aerial Photography collection at Whittier College to help assess the past land use at, and adjacent to, the subject property. Aerial photographs from the years 1927, 1928, 1937, 1945, 1947, 1949, and 1962 were available for our review.

TABLE
AERIAL PHOTOGRAPHY DATA REVIEWED

Date Flown	Flight Number	Frame Number
8/27	C-113	560
1928	C-300	K:351
2/20/37	C-4338	9
1/1/45	C-9250	78
6/47	C-11351	E:19
2/8/49	C-13373	2:59
7/18/49	C-13990	1:33
11/20/62	C-24385	5:2-4

All of the photographs reviewed showed the subject property as undeveloped. Scattered farmhouses and agricultural cultivation appeared in the general site area. None of the photographs reviewed showed signs of waste disposal or indicated other environmental concerns on the site or adjacent properties. No structures were shown onsite in any of the photographs. Structures associated with oil production were not observed onsite but were observed directly south of the site.

3.3 GENERAL GEOLOGY AND TOPOGRAPHY

The subject property is located in the northwestern portion of the Peninsular Ranges geomorphic province of southern California. It is situated on the central block of the Los Angeles Basin, a structural syncline (downfold) that is filled primarily with fluvial deposits of silt, sand, and gravel.

The site is approximately 17 miles south of the San Gabriel Mountains and approximately 13 miles north of the Pacific Ocean. Local topographic features include the Puente Hills, which are approximately 2 miles northeast of the property, and the San Gabriel River, which is approximately 2 miles to the west.

According to the USGS Whittier, California, 7-1/2 minute topographic quadrangle map, the elevation of the site is approximately 150 feet above mean sea level and the local topographic slope for the general area is southerly. Regional surface drainage patterns trend to the south, paralleling the San Gabriel River.

According to the hydrologic records of the Los Angeles County Department of Public Works, depth to first groundwater in the area is approximately 65 feet below ground

surface and has a southerly to southwesterly groundwater flow direction. This direction may be influenced by local pumping or injection wells operating in the area.

The area is in a Zone C hazard zone as defined by the Federal Emergency Management Agency. According to that agency, this is an area of minimal flooding.

The subject site is located on the northern boundary of the Santa Fe Springs Oil Field. No structures (oil wells, tanks, pumps) associated with oil production were observed onsite or in the immediate vicinity.

No known faults transect the site. In addition, the area is not located within a fault-rupture hazard zone as defined by the 1972, State of California Alquist-Priolo Special Studies Zones Act. However, the Whittier fault zone is located approximately 6 miles northeast of the site. This fault zone is an Alquist-Priolo Studies Zone. Therefore, the site could be subject to ground motion during earthquakes associated with this and other faults.

4.0 ENVIRONMENTAL FINDINGS

4.1 ONSITE FINDINGS

The onsite inspection by Ms. Gillespie on March 2, 1991, did not reveal any signs of underground storage tanks (USTs) or associated structures (fillpipes, manways), sumps, stained surficial soils, or unseasonably dead vegetation.

4.1.1 Electrical Transformers, Capacitors, and Ballasts

During the site walkthrough, Clayton inspected the property for the presence of liquid-cooled electrical units (transformers and capacitors) which units are notable because they may contain polychlorinated biphenyls (PCBs). PCB-containing units may subject the owner/operator to various regulatory requirements. The release of PCB fluids or their combustion products (in the event of a fire) are potential environmental liabilities and may require costly remediation.

Clayton observed three, liquid-cooled electrical transformers, located on the west side of the building. The transformers, owned by SCE, are caged within a wire fence and are posted with warning signs. No fluid leaks or stains were observed near the transformers.

According to SCE, they have never specified power-distribution transformers which use PCBs as the insulating and cooling liquid. All transformers manufactured prior to 1977 have been replaced with new ones that use mineral oil. Since the transformers were manufactured after 1977, they should contain mineral oil, and not PCB oil, as the coolant liquid.

The building interiors are illuminated with fluorescent light fixtures. Older fluorescent light fixtures have ballasts which often contain PCBs. Fluorescent light tubes contain varying amounts of mercury. The light fixtures onsite appeared to be in good condition.

and there was no evidence of leakage from these fixtures. However, the presence or absence of PCBs can only be determined by inspection and testing of all onsite light fixtures.

Special concern about the disposal of light fixtures is warranted, since under the California Code of Regulations (CCR), Title 22, PCBs and mercury are considered hazardous substances that must be disposed of as regulated hazardous waste in accordance with required standards.

4.1.2 Potential Asbestos-Containing Building Materials (ACBM)

During the site walkthrough, the buildings were briefly inspected for the presence of potential asbestos-containing materials such as ceiling and floor tile, pipe or boiler insulation, and sprayed-on insulation. The survey consisted of noting observable materials (i.e., materials which are readily accessible and visible without dismantling permanent structures such as walls, floors, and plaster ceilings) that may contain asbestos. The inspection was not intended to disclose all possible sources of asbestos at the site. Rather, it was designed to assess the presence of asbestos in the most significant (significant due to the quantity present, condition, and/or ease of accessibility) potential asbestos sources observed at the site.

Asbestos-containing materials may subject the owner to regulatory requirements designed to prevent the exposure of building occupants and maintenance or repair personnel to airborne asbestos fibers. The EPA has limited the asbestos content of some materials to less than 1% and has passed regulations requiring that no asbestos-containing materials be installed after 1995. At the present time, however, asbestos has not been eliminated from all manufactured building materials. Therefore, the age of a building or remodeling project cannot be the basis for assuming that a material does not contain asbestos.

The suspect ACBM found throughout the office area included floor tile, baseboard molding, and acoustical ceiling panels.

A. Asbestos Control and Management Program

Unless damaged or disturbed, cohesive asbestos-containing materials do not tend to become airborne. It is conceivable that water damage, maintenance activities, or vandalism could disturb the asbestos-containing materials, thereby increasing the risk of generating airborne asbestos fibers. To reduce this risk, you may wish to consider removing, encapsulating, or enclosing all exposed asbestos-containing materials. In each case, the optimum control option will depend on the amount of material present and its location and condition.

In California, removal or disturbance of 100 square feet or more of asbestos-containing materials must be performed by a contractor certified by the California Contractors' State License Board to conduct asbestos-related work and/or an employer/contractor registered with the California Occupational Safety and Health Administration (Cal/OSHA) to perform asbestos-related work.

As an alternative to removal, or in the interim, steps should be taken to prevent the release of fibers by regularly examining and repairing all damaged asbestos-containing materials. In addition, an effective asbestos management program should be implemented that includes taking precautions to protect employees during routine maintenance and building renovation activities.

B. Renovation/Demolition

The EPA requires that friable asbestos-containing materials (1% or greater asbestos content) be removed prior to demolition of a building. A friable material is one which, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure. Clayton usually recommends removing (1) nonfriable materials prior to demolition since these materials have the potential for becoming friable during demolition operations and (2) materials containing trace amounts of asbestos (less than 1%) since, in California, construction materials containing more than 0.1% asbestos are considered asbestos-containing under the California Health and Safety Code.

4.1.3 Underground and Aboveground Storage Tanks

Clayton observed no readily apparent visible evidence of USTs onsite during the site walkthrough.

However, lack of visible evidence, owner/operator knowledge, and registration of USTs does not preclude the possibility that USTs could be present on the site. A tank could have been used without the knowledge of the current owner/operator and prior to the regulatory agency requirement for registration. Also, visible evidence of USTs may not be present or may have been obscured from view during the onsite walkthrough.

Clayton observed a 200-gallon perchloroethylene AST along the north side of the building. The perchloroethylene is piped overhead from the tank to a vapor degreaser in the northwest corner of the building. No evidence of leaks or stains was observed under and around the AST and associated piping. New perchloroethylene is delivered by Baron Blakeslee Company as needed (approximately 600 gallons per year).

Miscellaneous-sized tanks of hydrogen gas, helium gas, liquid nitrogen, and liquid argon were observed outside the building. These gases and liquids are piped into the building and are used to cool portions of the vacuum furnaces. The tanks are either refilled or replaced by the vender when empty.

4.1.4 Hazardous Chemical Handling, Storage, and Disposal

Small amounts (1 gallon or less) of miscellaneous paints, lubricating fluids, and cleansers were observed on shelves and the surrounding floor in the former machine shop area in the east side of the building. The area appeared somewhat unkempt.

Six, 15-gallon poly containers of Bright Dip, Formula 1325™ were observed under the covered area along the northern wall of the building. Bright Dip™ is a corrosive liquid used as a parts cleaner.

Three, 55-gallon drums of acetone were observed outside along the north side of the building. The acetone is transferred to smaller wash bottles that are used in the alloy room to clean small metal parts prior to the application of alloy.

Five gallons of silicon-based diffusion pump oil for the vacuum furnaces, and 55 gallons of Shell Turbo-Oil 68™ were observed in the prior machine shop room.

MSDS for all chemicals used onsite were on file in the office. According to Mr. Ron Winters, a Techni-Braze employee, new employees review the MSDS.

Waste perchloroethylene (approximately 55 gallons per year) and waste acetone (approximately 110 gallons per year) are generated during manufacturing processes at the Techni-Braze facility under EPA generator ID number CAD981373922. These wastes are stored in 55-gallon drums until they are transported by Industrial Waste Utilization, Inc. to Rho Chem Corporation in Inglewood, California where they are recycled. Copies of hazardous waste manifests from the past 3 years are included in Appendix C.

It is our understanding that waste oil is accumulated in 55-gallon drums and stored on pallets in the covered storage area in the northeast corner of the property, until the oil vender picks them up for recycling. Clayton did not observe any waste oil drums at this location during the site inspection. No evidence of spillage, in the form of stains, was observed in this area.

Two extra propane tanks to fuel the forklifts were observed in the former machine shop area. These tanks were not secured in an upright position to avoid accidental tipping.

4.1.5 Miscellaneous

Clayton observed an air compressor outside and against the north wall of the building. This compressor supplies air to an air gun used to blow dust from parts. No evidence of leaks or stains was observed under and around the compressor.

Two at-grade troughs run parallel to the walls of the covered area north of the building. The troughs direct janitorial washwater into a drain that connects to a clarifier north of the building. The clarifier was originally installed to collect greasy water generated by the machine shop. The machine shop was shut down approximately 8 years ago and the clarifier was cleaned out at that time. According to Mr. Winters, the clarifier was last cleaned approximately 1 year ago. The clarifier is currently used to collect water. The water is periodically checked for pH by the Santa Fe Springs Fire Department and the Water Department. Techni-Braze is currently in compliance with pH levels in their discharged water.

Two water recirculation tanks were observed at the Techni-Braze facility. The one that is located west of the building and cooling tower, collects water from the cooling tower and pumps it back into the cooling system. The other tank, located inside the northwest part of the facility, collects and recirculates water used to cool a hydrogen, bottom-loading furnace.

A spray booth for the application of powdered alloy was observed in the northeast corner of the former machine shop. The booth is used to spray powdered alloy over a metal part prior to heat treatment. Techni-Braze has a current South Coast Air Quality Management District (SCAQMD) permit, number M40125, for the spray booth that expires on January 16, 1992 (Appendix C).

A vapor degreaser containing perchloroethylene was observed in the northwest corner of the facility. The vapor degreaser is used to remove oil from parts prior to brazing or heat treating. Small, oil-type stains were observed under and around the degreaser. Techni-Braze has a current SCAQMD permit, number M20698, for volatile organic compound emissions from the degreaser that expires on January 16, 1992 (Appendix C).

Seven furnaces (5 front loading and 2 bottom loading) were observed in the production area of the facility. After the alloy has been put on the metal part, it is heat treated in the furnace to create a metal to metal bond. The furnaces are permitted with the Santa Fe Springs Fire Department (Appendix C).

The site is bounded on the west by a Los Angeles County flood control channel. The channel is enclosed by a fence. A 1- to 2-inch high berm was observed along the base of the fence on the Techni-Braze side of the channel.

4.2 OFFSITE FINDINGS

Clayton retained the BBL Company to conduct an environmental record search of documents published by regulatory agencies to assess whether any regulated sites are located within 1 mile of the subject property. Clayton cross-checked the BBL environmental record search report for accuracy. A complete copy of this report is provided in Appendix D.

Research of the following documents revealed no listed hazardous sites within a 1-mile radius of the site:

- EPA Federal Facilities, Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS), July 1990
- Federal Superfund Liens (LIENS), April 1990
- Regional Water Quality Control Board Toxic Pits
- California Regional Water Quality Control Board Toxic Releases
- State of California Bond Expenditure Plan (State Superfund), January 1990
- State of California Waste Management Board Solid Waste Information System (SWIS), March 1990
- State of California Department of Health Services Well Investigation Program (WIP)

A review of the EPA Superfund Program CERCLIS. July 1990, list disclosed the following sites within a 1-mile radius that are involved in site investigations:

Site:	BELL PETROLEUM
Address:	12250 E BELL RANCH RD
City:	SANTA FE SPRINGS
Status:	No Further Action
Site:	PILOT CHEM CO
Address:	11756 BURKE ST
City:	SANTA FE SPRINGS
Status:	No Further Action
Site:	WEST BENT BOLT
Address:	8623 S DICE RD
City:	SANTA FE SPRINGS
Site:	LIQUID AIR CORP
Address:	8832 S DICE RD
City:	SANTA FE SPRINGS
Status:	No Further Action
Site:	BURDETT OXYGEN CO OF AMERICA
Address:	8838 S DICE RD
City:	SANTA FE SPRINGS
Status:	No Further Action
Site:	SO CA CHEM CO INC
Address:	8851 S DICE RD
City:	SANTA FE SPRINGS
Status:	No Further Action
Site:	DIVERSEY WYANDOTTE CORP
Address:	8921 S DICE RD
City:	SANTA FE SPRINGS
Site:	DICE RD & LOS NIETOS DUMP
Address:	9165 S DICE RD
City:	SANTA FE SPRINGS
Status:	No Further Action
Site:	FINE LINE PAINT CORP
Address:	12200 E LOS NIETOS RD
City:	SANTA FE SPRINGS
Status:	No Further Action

Site: WASTE DISPOSAL INC
Address: 12731 E LOS NIETOS RD
City: SANTA FE SPRINGS

Site: LOS ANGELES BY-PRODUCTS
Address: 9615 S NORWALK BLVD
City: SANTA FE SPRINGS
Status: No Further Action

Site: MCKESSON CHEM CO
Address: 11600 PIKE ST
City: SANTA FE SPRINGS
Status: No Further Action

Site: LARWIL CONSULTANTS/PLATING OPERATIONS
Address: SANTA FE SPRINGS RD
City: SANTA FE SPRINGS
Status: No Further Action

Site: CAL WESTERN PAINT CORP
Address: 11748 E SLAUSON AVE
City: SANTA FE SPRINGS
Status: No Further Action

Site: WESTERN SCREW PRODUCTS
Address: 11770 E SLAUSON AVE
City: SANTA FE SPRINGS
Status: No Further Action

Site: FOREMOST MCKESSON INC
Address: 9005 S SORENSEN AVE
City: SANTA FE SPRINGS

Site: RIPPY FRED R INC
Address: 12471 E WASHINGTON BLVD
City: WHITTIER
Status: No Further Action

A review of the EPA National Priorities List (NPL), July 1990, disclosed the following site within a 1-mile radius that is involved in site investigations:

Site: WASTE DISPOSAL INC
Address: 12731 E LOS NIETOS RD
City: SANTA FE SPRINGS

A review of the Regional and State Water Quality Control Board, Leaking Underground Storage Tanks (LUST), the Regional Water Quality Control Board Toxic Releases, and

the State of California, Office of Planning and Research, CORTESE database lists disclosed the following sites within a 1-mile radius that are involved in site investigations:

Site: BELL PETROLEUM
Address: 12250 E BELL RANCH RD
City: SANTA FE SPRINGS
Status: Abandoned Hazardous Waste Site

Site: WEST BENT BOLT
Address: 8623 S DICE RD
City: SANTA FE SPRINGS
Status: Abandoned Hazardous Waste Site

Site: DIVERSEY WYANDOTTE CORPORATION
Address: 8921 S DICE RD
City: SANTA FE SPRINGS
Status: Abandoned Hazardous Waste Site

Site: UNION OIL OF CALIFORNIA
Address: 9645 SANTA FE SPRINGS RD
City: SANTA FE SPRINGS
Status: Leaking Tank

Site: WESTERN SCREW PRODUCTS #1
Address: 11770 E SLAUSON AVE
City: SANTA FE SPRINGS
Status: Abandoned Hazardous Waste Site

Site: MCKESSON CHEMICAL COMPANY
Address: 9005 S SORENSEN AVE
City: SANTA FE SPRINGS
Status: Abandoned Hazardous Waste Site

Site: SHELL SERVICE STATION
Address: 11515 E SLAUSON AVE
City: WHITTIER

Site: FLIGHT TRUCKING
Address: 11770 BURKE ST
City: SANTA FE SPRINGS
Status: Case Closed

Site: LIQUID AIR CORP.
Address: 8832 S DICE RD
City: SANTA FE SPRINGS
Status: Preliminary Site Assessment underway

Site: VALVOLINE OIL COMPANY
Address: 9520 JOHN ST
City: SANTA FE SPRINGS
Status: Remediation Plan submitted

Site: AMERICAN MEDICAL ENTERPRISES
Address: 12508 E LAMBERT RD
City: WHITTIER
Status: Preliminary Site Assessment underway

Site: SOUTHERN STEEL & SUPPLY CO, INC
Address: 12350 E LOS NIETOS RD
City: SANTA FE SPRINGS
Status: Post Remediation Monitoring

Site: TOXICS SPRAY DUST INC.
Address: 12651 E LOS NIETOS RD
City: SANTA FE SPRINGS
Status: Pollution Characterization

Site: BARRET STATION
Address: 8728 S NORWALK BLVD
City: WHITTIER
Status: No Action Taken

Site: ACI GLASS PRODUCTS
Address: 9010 S NORWALK BLVD
City: SANTA FE SPRINGS
Status: No Action Taken

Site: SANTA FE TRUCK TERMINAL
Address: 9750 S NORWALK BLVD
City: SANTA FE SPRINGS
Status: Leak being confirmed

Site: PFI, INC.
Address: 9215 SANTA FE SPRINGS RD
City: SANTA FE SPRINGS
Status: Case Closed

Site: UNION OIL OF CALIFORNIA
Address: 9645 SANTA FE SPRINGS RD
City: SANTA FE SPRINGS
Status: No Action Taken

Site: WESTERN GALVANIZING CORP.
Address: 9719 SANTA FE SPRINGS RD
City: SANTA FE SPRINGS
Status: No Action Taken

Site: DIA-LOG CO.
Address: 9756 SANTA FE SPRINGS RD
City: SANTA FE SPRINGS
Status: No Action Taken

Site: SOUTH PACIFIC STEEL
Address: 9835 SANTA FE SPRINGS RD
City: SANTA FE SPRINGS
Status: Remediation underway

Site: AGRICULTURAL PROPERTY
Address: SLAUSON AVE
City: WHITTIER
Status: Pollution Characterization

Site: CIRCLE K CORPORATION
Address: 11462 E SLAUSON AVE
City: SANTA FE SPRINGS
Status: No Action Taken

Site: PRYOR-GIGGEY COMPANY
Address: 12393 E SLAUSON AVE
City: WHITTIER
Status: Leak being confirmed

Site: LINCOLN INDUSTRIAL CENTER
Address: 12500 E SLAUSON AVE
City: SANTA FE SPRINGS
Status: Remediation underway

Site: PETERSON/PURITAN INC
Address: 9101 S SORENSEN AVE
City: SANTA FE SPRINGS
Status: Case Closed

Site: US GYPSUM CO.
Address: 9306 S SORENSEN AVE
City: SANTA FE SPRINGS
Status: Case Closed

Site: DAYTON SUPERIOR
Address: 9415 S SORENSEN AVE
City: SANTA FE SPRINGS
Status: Pollution Characterization

Site: SHELL STATION
Address: 11347 E WASHINGTON BLVD
City: WHITTIER
Status: Leak being confirmed

Site: R.B. PAINT & BODY CENTER
Address: 11508 E WASHINGTON BLVD
City: SANTA FE SPRINGS
Status: No Action Taken

Site: CALIF TARGET ENTERPRISES
Address: 11770 E WASHINGTON BLVD
City: SANTA FE SPRINGS
Status: Preliminary Site Assessment underway

Site: UNOCAL 76 STATION #5091
Address: 11808 E WASHINGTON BLVD
City: WHITTIER
Status: Case Closed

Site: SOUTHERN CALIF. EDISON
Address: 11954 E WASHINGTON BLVD
City: SANTA FE SPRINGS
Status: No Action Taken

A review of the Regional and State of California Solid Waste Assessment Test (SWAT), July 1990, lists revealed the following sites located within one mile of the subject site:

Site: DICE ROAD
Address: 9165 S DICE RD
City: SANTA FE SPRINGS
Status: Priority 11

Site: PEOPLES DISPOSAL CO
Address: 9525 SANTA FE SPRINGS RD
City: SANTA FE SPRINGS
Status: Priority 12

Site: WASTE DISPOSAL INC.
Address: 12700 E LOS NIETOS RD
City: SANTA FE SPRINGS
Status: Priority 4

Site: SANTA FE SPRINGS SITE
Address: 9615 S NORWALK BLVD
City: SANTA FE SPRINGS
Status: Priority 3

A review of the California Department of Health Services Abandoned Sites Program Information System (ASPIS), July 1990, revealed 104 listed sites within 1 mile of the subject site. Of the 104 sites, only the following 11 sites are currently involved in further site action:

Site: BELL PETROLEUM
Address: 12250 E BELL RANCH RD
City: SANTA FE SPRINGS
Status: Site Inspection Required, low priority

Site: PILOT CHEMICAL CO
Address: 11756 BURKE ST
City: SANTA FE SPRINGS
Status: Site Inspection Required, high priority

Site: WEST BENT BOLT
Address: 8623 S DICE RD
City: SANTA FE SPRINGS
Status: Site Inspection Required, low priority

Site: BURDETT OXYGEN CO OF CALIF (1)
Address: 8832 S DICE RD, & 8838
City: SANTA FE SPRINGS
Status: Pending Status

Site: LIQUID AIR
Address: 8832 S DICE RD
City: SANTA FE SPRINGS
Status: Site Inspection Required, medium priority

Site: SOUTHERN CALIF CHEMICAL CO
Address: 8851 S DICE RD
City: SANTA FE SPRINGS
Status: Pending Status

Site: DIVERSEY WYANDOTTE CORP
Address: 8921 S DICE RD
City: SANTA FE SPRINGS
Status: Site Inspection Required, high priority

Site: LOS NIETOS DUMP
Address: 12731 E LOS NIETOS RD
City: SANTA FE SPRINGS
Status: Superfund

Site: L.A. BY-PRODUCTS/NORWALK PIT 2
Address: 9615 S NORWALK BLVD
City: SANTA FE SPRINGS
Status: Referred to Enforcement

Site: WESTERN SCREW PRODUCTS #1
Address: 11770 E SLAUSON AVE
City: SANTA FE SPRINGS
Status: Pending Status

Site: MCKESSON CHEMICAL CO
Address: 9005 S SORENSEN AVE
City: SANTA FE SPRINGS
Status: Pending Status

Because of the large number of sites listed with regulatory agencies, Clayton was unable to investigate if there is contaminated soil and/or groundwater at the above listed sites.

The groundwater flow direction appears to be from the north to the south or southwest. Any regulated sites located north of the subject site that have contaminated groundwater could pose a potential groundwater contamination problem to the subject site. Further substantiation of these offsite conditions can only be made through a site-by-site review of records.

The information and opinions rendered in this report are exclusively for use by Techni-Braze, Inc. Clayton Environmental Consultants, Inc. will not distribute this report without your consent except as may be required by law or court order. The information and opinions expressed in this report are given in response to our limited assignment and should be evaluated and implemented only in light of that assignment. We accept responsibility for the competent performance of our duties in executing the assignment and preparing this report in accordance with the normal standards of our profession, but disclaim any responsibility for consequential damages.

Sincerely,

Shannon Gillespie

Shannon Gillespie
Environmental Consultant

Reviewed by:

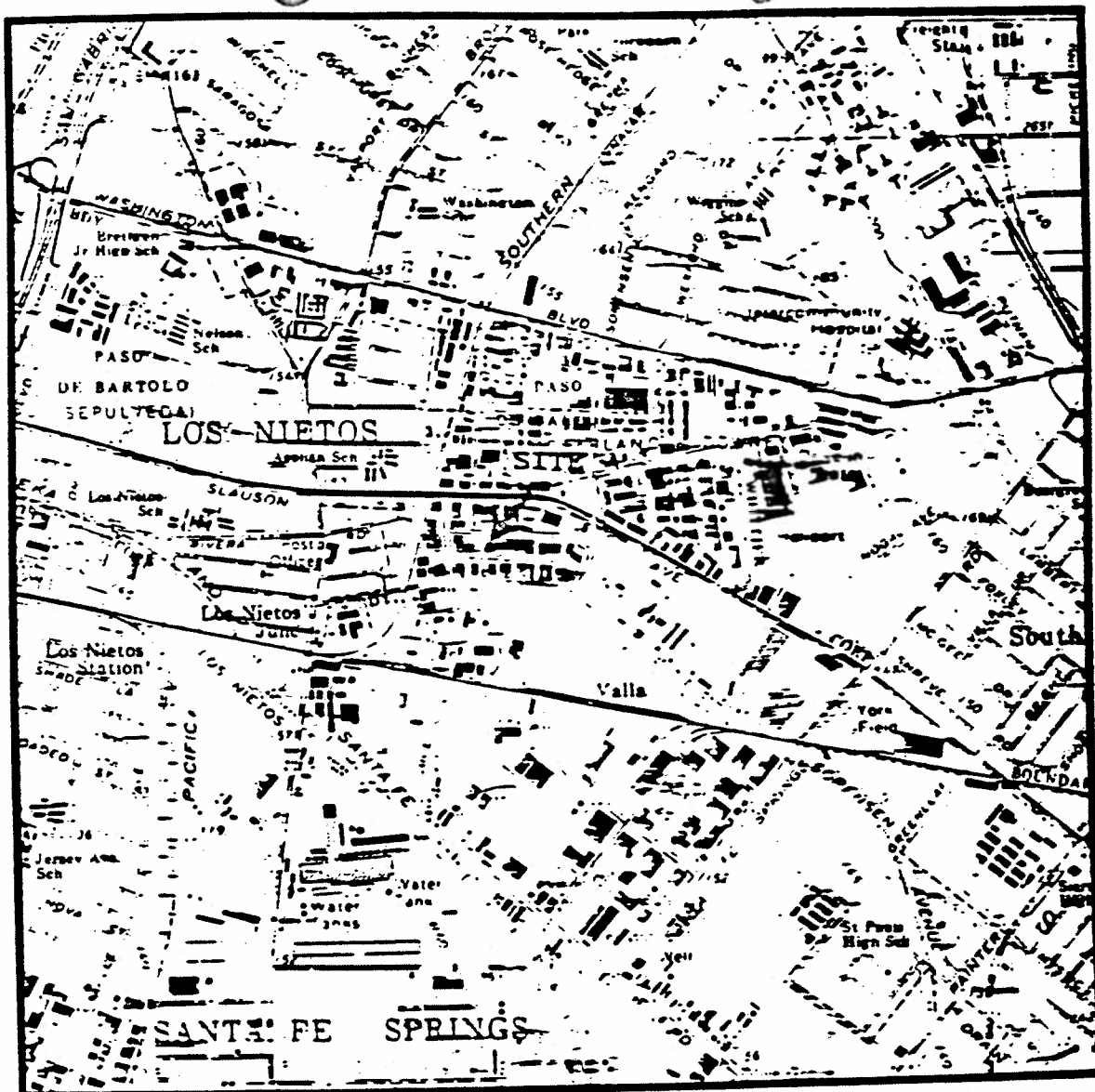
David H. Randell

David H. Randell, R.G.
Supervisor, Environmental Engineering
Pacific Operations

April 22, 1991

APPENDIX A

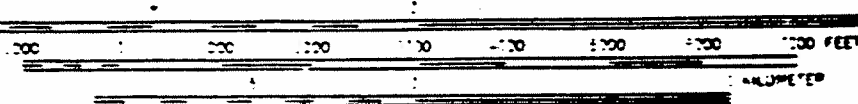
FIGURES



BASEMAP TAKEN FROM 1965 USGS WHITTIER, CALIFORNIA
QUADRANGLE, 7.5 MINUTE SERIES (TOPOGRAPHIC), PHOTOREVISED 1981.



SCALE 1:24,000



CONTOUR INTERVAL 20 FEET



CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

FIGURE

GENERAL SITE LOCATION
AND TOPOGRAPHY

1

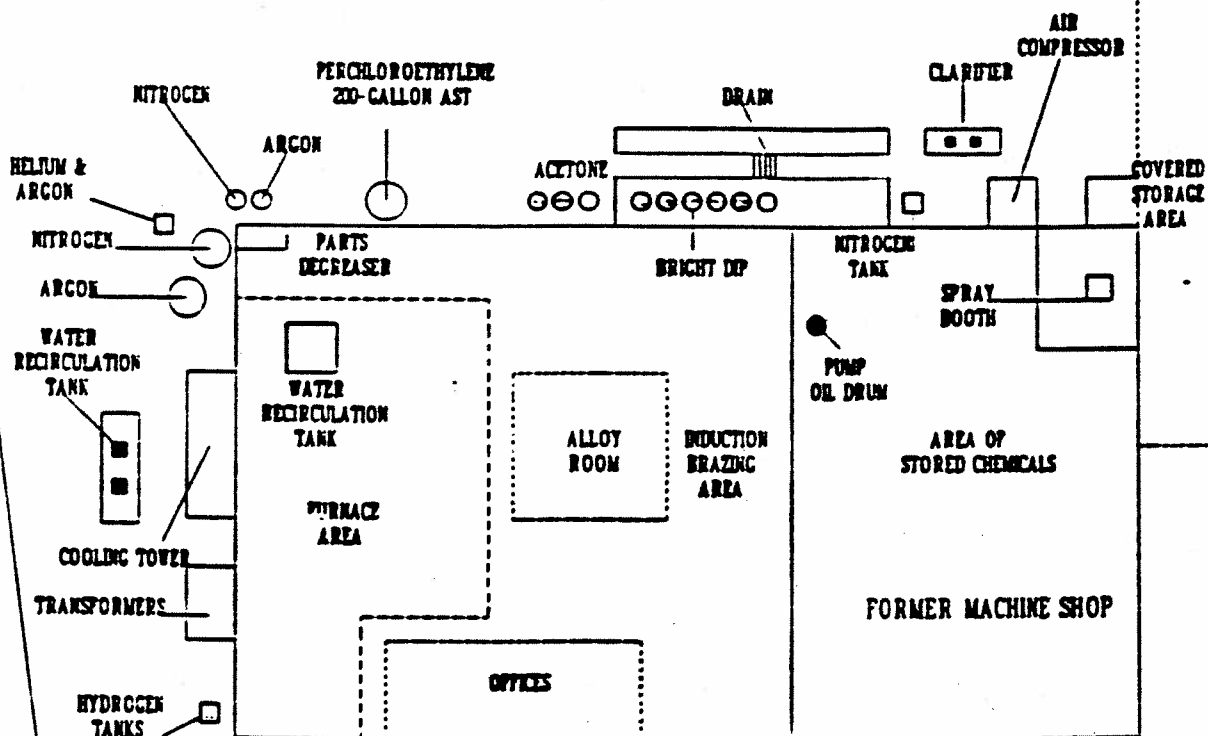
TECHNI BRAZE, INC.
SANTA FE SPRINGS, CALIFORNIA

PROJECT NO. 3449300

4/91

LOS ANGELES COUNTY FLOOD CONTROL CHANNEL

PARKING



PARKING

BURKE STREET

- CHEMICAL DRUM, VARIOUS SIZES
- "SIX-PACK", MOBILE TANK RACK
- ABOVEGROUND STORAGE TANK

DRAWING NOT TO SCALE

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

FIGURE

SITE LOCATION MAP

2



TECHNI-BRAZE, INC.
SANTA ANA BRIDGE, CALIFORNIA

PROJECT NO. 34493.00

4/91

APPENDIX B
PHOTOGRAPHIC RECORD

**Santa Fe Springs Fire Department
Hazardous Materials Inventory Sheet**
(For trade secret page use pink form available at Fire Dept.)

Page 1 of 2
Reporting Period:
1/1 to 12/31, 1990

Business Name and Address: Techni-Braze, Inc. 11845 Burke St., Santa Fe Springs 90
Instructions are located on the back of the Hazardous Materials Disclosure Statement.

Product Identification

Chemical Number 1 of 3

Common Name: Acetone DOT #: 1090 (4 digits)
Manufacturers Name and Phone Number: Rho-Chem Corp. (213) 776-6233

Physical State (check one):

Solid: ☐ Radioactive: ☐ Pure: ☒ Generators US EPA ID# CID981373822 applies
Liquid: ☒ (If radioactive, Mixture: ☐ If waste: annual amount generated 25 Gal. (Tons)
Gas: ☐ (Curies) Industrial State Waste Number F003 (Three digits from the Uniform Waste
Waste Util., Brea, CA Manifest, DHS Form 6322)

Physical and Health Hazards

(Use NFPA 704
Numbers)



Check all
that apply:

Sudden pressure release: ☐
Health delayed, chronic: ☐
Health immediate, acute: ☐

Amount/Time At Facility

Maximum daily amount: _____ Units of measure: gallons: ☒ pounds: ☐ cubic feet: ☐
Average daily amount: _____ (Gallons only) (Pounds only) (Cubic feet at STP only)
Number of days on-site per year: _____ Largest container on-site: 55 Gal.

Storage Codes (see back)

Storage Codes:	Hazardous component(s) in chemical:	Composition:	Reproductive toxin or Carcinogen, chronic low dose exposure	CAS #
<u>0</u> <u>1</u> <u>1</u> <u>1</u>	1. <u>CH₃COCH₃</u>	<u>100</u> %	<input type="checkbox"/>	<u>67541</u>
Pressure Codes: <u>1</u> <u>1</u> <u>1</u>	2. _____	_____ %	<input type="checkbox"/>	_____
Temperature Codes: <u>4</u> <u>1</u> <u>1</u> <u>1</u>	3. _____	_____ %	<input type="checkbox"/>	_____
	4. _____	_____ %	<input type="checkbox"/>	_____
	5. _____	_____ %	<input type="checkbox"/>	_____

Product Identification

Chemical Number 2 of 3

Common Name: Stabilized perchloroethylene & Waste DOT #: 1897 (4 digits)
Manufacturers Name and Phone Number: Baron-Blakeslee (213) 640-9732

Physical State (check one):

Solid: ☐ Radioactive: ☐ Pure: ☐ Return for reclaiming by Baron-Blakeslee
Liquid: ☒ (If radioactive, Mixture: ☒ If waste: annual amount generated 55 Gal. (Tons)
Gas: ☐ (Curies) Industrial State Waste Number F0001 (Three digits from the Uniform Waste
Manifest, DHS Form 6322)

Physical and Health Hazards

(Use NFPA 704
Numbers)



Check all
that apply:

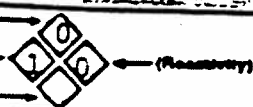
Sudden pressure release: ☐
Health delayed, chronic: ☐
Health immediate, acute: ☐

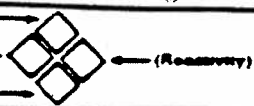
Amount/Time At Facility

Maximum daily amount: 2 Gal. Units of measure: gallons: ☒ pounds: ☐ cubic feet: ☐
Average daily amount: 1 Gal. (Gallons only) (Pounds only) (Cubic feet at STP only)
Number of days on-site per year: every Largest container on-site: 200 Gal.

Storage Codes (see back)

Storage Codes:	Hazardous component(s) in chemical:	Composition:	Reproductive toxin or Carcinogen, chronic low dose exposure	CAS #
<u>A</u> <u>1</u> <u>1</u> <u>1</u>	1. <u>Tetra-Chloroethylene</u>	<u>100</u> %	<input type="checkbox"/>	<u>127-18-4</u>
Pressure Codes: <u>1</u> <u>1</u> <u>1</u>	2. _____	_____ %	<input type="checkbox"/>	_____
Temperature Codes: <u>4</u> <u>1</u> <u>1</u> <u>1</u>	3. _____	_____ %	<input type="checkbox"/>	_____
	4. _____	_____ %	<input type="checkbox"/>	_____
	5. _____	_____ %	<input type="checkbox"/>	_____

Product Identification		Chemical Number <u>3</u> of <u>3</u>																									
Common Name: <u>Shell Turbo-Oil 68</u>		DOT #: <u>1270</u>																									
Manufacturers Name and Phone Number: <u>J. V. Shannon (213) 864-1741</u>																											
Physical State (check one):																											
Solid: <input type="checkbox"/>	Radioactive: <input type="checkbox"/>	Pure: <input checked="" type="checkbox"/>	Generators US EPA CAD <u>981373822</u> Applies If waste: annual amount generated <u>55 Gal.</u> (Tons) State Waste Number <u>None</u> Industrial Waste Util. of _____ <small>(Three digit code from the Uniform Waste Manifest, OHS Form 602B)</small>																								
Liquid: <input checked="" type="checkbox"/>	(If radioactive, _____ Curies)	Mixture: <input type="checkbox"/>																									
Gas: <input type="checkbox"/>																											
Physical and Health Hazards																											
(Use NFPA 704 Numbers)			Check all that apply: Sudden pressure release: <input type="checkbox"/> Health delayed, chronic: <input type="checkbox"/> Health immediate, acute: <input type="checkbox"/>																								
Amount/Time At Facility																											
Maximum daily amount: <u>.3 Gal.</u>		Units of measure: gallons: <input checked="" type="checkbox"/> pounds: <input type="checkbox"/> cubic feet: <input type="checkbox"/>																									
Average daily amount: <u>.3 Gal.</u>		<small>(Liquid only) (Solid only) (Gases at STP only)</small>																									
Number of days on-site per year: <u>everyday</u>		Largest container on-site: <u>55 Gal.</u>																									
Storage Codes (see back)																											
Storage Codes: <u>D1</u>	Hazardous component(s) in chemical:																										
Pressure Codes: <u>1</u>	Composition:																										
Temperature Codes: <u>4</u>	<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>Composition</th> <th>Reproductive Test or Carcinogen - check box if appropriate</th> <th>CAS #</th> </tr> </thead> <tbody> <tr> <td>1. Petroleum Hydrocarbons</td> <td>99 %</td> <td><input type="checkbox"/></td> <td>64742 - 58</td> </tr> <tr> <td>2. _____</td> <td>_____ %</td> <td><input type="checkbox"/></td> <td>_____</td> </tr> <tr> <td>3. _____</td> <td>_____ %</td> <td><input type="checkbox"/></td> <td>_____</td> </tr> <tr> <td>4. _____</td> <td>_____ %</td> <td><input type="checkbox"/></td> <td>_____</td> </tr> <tr> <td>5. _____</td> <td>_____ %</td> <td><input type="checkbox"/></td> <td>_____</td> </tr> </tbody> </table>				Composition	Reproductive Test or Carcinogen - check box if appropriate	CAS #	1. Petroleum Hydrocarbons	99 %	<input type="checkbox"/>	64742 - 58	2. _____	_____ %	<input type="checkbox"/>	_____	3. _____	_____ %	<input type="checkbox"/>	_____	4. _____	_____ %	<input type="checkbox"/>	_____	5. _____	_____ %	<input type="checkbox"/>	_____
	Composition	Reproductive Test or Carcinogen - check box if appropriate	CAS #																								
1. Petroleum Hydrocarbons	99 %	<input type="checkbox"/>	64742 - 58																								
2. _____	_____ %	<input type="checkbox"/>	_____																								
3. _____	_____ %	<input type="checkbox"/>	_____																								
4. _____	_____ %	<input type="checkbox"/>	_____																								
5. _____	_____ %	<input type="checkbox"/>	_____																								

Product Identification		Chemical Number _____ of _____																									
Common Name: _____		DOT #: _____																									
Manufacturers Name and Phone Number: _____																											
Physical State (check one):																											
Solid: <input type="checkbox"/>	Radioactive: <input type="checkbox"/>	Pure: <input type="checkbox"/>	If waste: annual amount generated _____ (Tons) State Waste Number _____ <small>(Three digit code from the Uniform Waste Manifest, OHS Form 602B)</small>																								
Liquid: <input type="checkbox"/>	(If radioactive, _____ Curies)	Mixture: <input type="checkbox"/>																									
Gas: <input type="checkbox"/>																											
Physical and Health Hazards																											
(Use NFPA 704 Numbers)			Check all that apply: Sudden pressure release: <input type="checkbox"/> Health delayed, chronic: <input type="checkbox"/> Health immediate, acute: <input type="checkbox"/>																								
Amount/Time At Facility																											
Maximum daily amount: _____		Units of measure: gallons: <input type="checkbox"/> pounds: <input type="checkbox"/> cubic feet: <input type="checkbox"/>																									
Average daily amount: _____		<small>(Liquid only) (Solid only) (Gases at STP only)</small>																									
Number of days on-site per year: _____		Largest container on-site: _____																									
Storage Codes (see back)																											
Storage Codes: _____	Hazardous component(s) in chemical:																										
Pressure Codes: _____	Composition:																										
Temperature Codes: _____	<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>Composition</th> <th>Reproductive Test or Carcinogen - check box if appropriate</th> <th>CAS #</th> </tr> </thead> <tbody> <tr> <td>1. _____</td> <td>_____ %</td> <td><input type="checkbox"/></td> <td>_____</td> </tr> <tr> <td>2. _____</td> <td>_____ %</td> <td><input type="checkbox"/></td> <td>_____</td> </tr> <tr> <td>3. _____</td> <td>_____ %</td> <td><input type="checkbox"/></td> <td>_____</td> </tr> <tr> <td>4. _____</td> <td>_____ %</td> <td><input type="checkbox"/></td> <td>_____</td> </tr> <tr> <td>5. _____</td> <td>_____ %</td> <td><input type="checkbox"/></td> <td>_____</td> </tr> </tbody> </table>				Composition	Reproductive Test or Carcinogen - check box if appropriate	CAS #	1. _____	_____ %	<input type="checkbox"/>	_____	2. _____	_____ %	<input type="checkbox"/>	_____	3. _____	_____ %	<input type="checkbox"/>	_____	4. _____	_____ %	<input type="checkbox"/>	_____	5. _____	_____ %	<input type="checkbox"/>	_____
	Composition	Reproductive Test or Carcinogen - check box if appropriate	CAS #																								
1. _____	_____ %	<input type="checkbox"/>	_____																								
2. _____	_____ %	<input type="checkbox"/>	_____																								
3. _____	_____ %	<input type="checkbox"/>	_____																								
4. _____	_____ %	<input type="checkbox"/>	_____																								
5. _____	_____ %	<input type="checkbox"/>	_____																								

Please print or type. (Form designed for use on dot grid paper)

UNIFORM HAZARDOUS
WASTE MANIFEST

Generator's US EPA ID No.

Manifest Document No.

2. Page 1

Information in the shaded areas
is not required by Federal law.

3. Generator's Name and Mailing Address

TechnicBrace

11845 Burke St. Santa Fe Springs, Ca.

4. Generator's Phone 213 693-7733

A. State Manifest Document Number

88369064

B. State Generator's ID

5. Transporter 1 Company Name

a.

US EPA ID Number

C. State Transporter's ID

006858

6. Transporter 2 Company Name

a.

US EPA ID Number

D. Transporter's Phone

714) 984-9984

7. Designated Facility Name and Site Address

a.

US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

8. Designated Facility Name and Site Address

a.

US EPA ID Number

G. State Facility's ID

H. Facility's Phone

Rho Chem Corp.

425 Isis Ave.

Inglewood Ca. 90301

C A M D N D 18 13 16 14 13 12

213) 776-6833

11. Waste Description (including Proper Shipping Name, Hazard Class, and ID Number)

12. Containers
No. Type13. Total
Quantity14. Unit
Wt/Vol

15. Waste No.

a.

Waste ORN-3 Liquid nos NA 1693 (F001)

01011 D 00050G

State

711
EPA/Other
F001b. WASTE FLAMMABLE LIQUID NOS
UNDX-1993

01011 D 00050

State

214
EPA/Other
F003

c.

State

EPA/Other

d.

State

EPA/Other

12. Additional Descriptions for Materials Listed Above

A) Perchloroethylene 80-100%, Water 0-20%
B) ACETONE 100%

K. Handling Codes for Wastes Listed Above

15. Special handling instructions and Additional information

Respirator - gloves - goggles

16.

GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment. OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name

Signature

Month Day Year

Burton Young

Burt Young

10/1/89

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

Rafael Arillo A

Rafael Arillo A

10/1/89

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.

Printed/Typed Name

Signature

Month Day Year

ENVIRONMENTAL RECORDS SEARCH

listed by source

INTRODUCTION

The following government sources have been searched for sites within half mile radius unless otherwise stated, of the subject location.

BBL has used its best effort but makes no claims as to the completeness or accuracy of the referenced government sources or the completeness of the search. Our records are frequently updated but only as current as their publishing date and may not represent the entire field of known or potential hazardous waste or contaminated sites. To ensure complete coverage of the subject property and surrounding area, sites may be included in the list if there was any doubt as to the location because of discrepancies in map location, zip code, address, or other information in our sources.

FEDERAL SOURCES

NPL National Priority List

EPA has prioritized sites with significant risk to human health and the environment. These sites receive remedial funding under the Comprehensive Environmental Response Conservation and Liability Act (CERCLA).

Site: WASTE DISPOSAL INC
Address: 12731 E LOS NIETOS RD
City: SANTA FE SPRINGS
Status: .

CERCLIS Comprehensive Environmental Response, Compensation, and Liability Act

CERCLIS is a data base used by the EPA to track activities conducted under its Superfund Program. Sites which come to EPA's attention that may have a potential for releasing hazardous substances into the environment are added to the CERCLIS inventory.

Status Codes: NFA - No Further Action

Site: BELL PETROLEUM
Address: 12250 E BELL RANCH RD
City: SANTA FE SPRINGS
Status: NFA - No Further Action

Site: PILOT CHEM CO
Address: 11756 BURKE ST
City: SANTA FE SPRINGS
Map Loc: 7
Status: *NFA - No Further Action*

Site: WEST BENT BOLT
Address: 8623 S DICE RD
City: SANTA FE SPRINGS
Map Loc: 14
Status: -

Site: LIQUID AIR CORP
Address: 8832 S DICE RD
City: SANTA FE SPRINGS
Map Loc: 15
Status: *NFA - No Further Action*

Site: BURDETT OXYGEN CO OF AMERICA
Address: 8838 S DICE RD
City: SANTA FE SPRINGS
Map Loc: 17
Status: *NFA - No Further Action*

Site: SO CA CHEM CO INC
Address: 8851 S DICE RD
City: SANTA FE SPRINGS
Map Loc: 18
Status: *NFA - No Further Action*

Site: DIVERSEY WYANDOTTE CORP
Address: 8921 S DICE RD
City: SANTA FE SPRINGS
Map Loc: 19
Status: -

Site: DICE RD & LOS NIETOS DUMP
Address: 9165 S DICE RD
City: SANTA FE SPRINGS
Map Loc: 23
Status: *NFA - No Further Action*

Site: FINE LINE PAINT CORP
Address: 12200 E LOS NIETOS RD
City: SANTA FE SPRINGS
Status: *NFA - No Further Action*

11845 BURKE ST. SANTA FE SPRINGS

Page: 3
Job: CLAY002
Date: 04-01-199

Site: WASTE DISPOSAL INC
Address: 12731 E LOS NIETOS RD
City: SANTA FE SPRINGS
Status: -

Site: LOS ANGELES BY-PRODUCTS
Address: 9615 S NORWALK BLVD
City: SANTA FE SPRINGS
Status: *NFA - No Further Action*

Site: MCKESSON CHEM CO
Address: 11600 PIKE ST
City: SANTA FE SPRINGS
Status: *NFA - No Further Action*

Site: LARWIL CONSULTANTS/PLATING OPE
Address: SANTA FE SPRINGS RD
City: SANTA FE SPRINGS
Status: *NFA - No Further Action*

Site: CAL WESTERN APINT CORP
Address: 11746 E CLAUSON AVE
City: SANTA FE SPRINGS
Map Loc: 42
Status: *NFA - No Further Action*

Site: WESTERN SCREW PRODUCTS
Address: 11770 E SLAUSON AVE
City: SANTA FE SPRINGS
Map Loc: 43
Status: *NFA - No Further Action*

Site: FOREMOST MCKESSON INC
Address: 9005 S SORENSEN AVE
City: SANTA FE SPRINGS
Map Loc: 52
Status: -

Site: RIPPY FRED R INC
Address: 12471 E WASHINGTON BLVD
City: WHITTIER
Status: *NFA - No Further Action*

FEDFAC Federal Facilities

As part of the CERCLIS program, federal facilities with known or suspected environmental problems are included in this list.

No listings within the specified range.

LIENS Superfund Liens

A current list of Federal Superfund Liens as compiled by the Office of Enforcement and Compliance Monitoring (OECM), EPA, Washington, D.C. based upon information submitted EPA's ten Regional Offices. The EPA and the OECM make no representations regarding the accuracy or completeness of the list.

No listings within the specified range.

CALIFORNIA STATE SOURCES

BEP The Bond Expenditure Plan

The Health and Safety code, as amended by AB 129, requires the Department of Health Services to develop a site-specific expenditure plan as the basis for an appropriation of California Hazardous Substance Cleanup Bond Act of 1984 funds.

The Department is also required to update the report annually and report any significant adjustments to the Legislature on an ongoing basis. The plan identifies California hazardous waste sites targeted for cleanup by responsible parties, the Department and the federal Environmental Protection Agency over the next five years.

No listings within the specified range.

ASPIS The Abandoned Sites Program Information System

The Historical Abandoned Site Survey Program identified certain potential hazardous waste sites. These sites determinations were generally not made via sampling and site characterization. They were made as a result of file searches and windshield surveys.

Some of the sites may have had a site inspection with sampling.

The information has been compiled into this database by California Department of Health Services in accordance with Section 253596 of the California Health and Safety Code.

Status Codes: UNR Unresolved
 NFA No Further Action
 PA Preliminary Assessment
 SIR Site Inspection Required
 SSR Site Screening Required
 SUPFD Superfund
 PDS Pending Status
 REF Referred to Enforcement

(Suffixes L, M and H indicates Low, Medium or High Priority)

Site: ELECTRONIC CHROME CO
Address: 8101 ALLPORT AVE
City: SANTA FE SPRINGS
Map Loc: 1
Status: NFA - No Further Action

Site: WELBOURNE ENGINEERING
Address: 8237 ALLPORT AVE
City: SANTA FE SPRINGS
Map Loc: 2
Status: NFA - No Further Action

Site: K & W PRODUCTS
Address: 8319 ALLPORT AVE
City: SANTA FE SPRINGS
Map Loc: 3
Status: NFA - No Further Action

Site: APOLLO ABRASIVES CO
Address: 8324 ALLPORT AVE
City: SANTA FE SPRINGS
Map Loc: 4
Status: NFA - No Further Action

Site: SANTA FE FIBERGLASS OF CALIF
Address: 8330 ALLPORT AVE
City: SANTA FE SPRINGS
Map Loc: 5
Status: NFA - No Further Action

Site:	DETERGENTS, INC
Address:	12143 ALTAMAR PL
City:	SANTA FE SPRINGS
Map Loc:	6
Status:	NFA - No Further Action
Site:	ARMOUR WORLD WIDE GLASS CO
Address:	9401 ANN ST
City:	SANTA FE SPRINGS
Status:	NFA - No Further Action
Site:	TROJAN BATTERY CO #2
Address:	9440 ANN ST
City:	SANTA FE SPRINGS
Status:	NFA - No Further Action
Site:	EXIDE BATTERY
Address:	9536 S ANN ST
City:	SANTA FE SPRINGS
Status:	NFA - No Further Action
Site:	ASSOCIATED PLATING CO
Address:	9636 S ANN ST
City:	SANTA FE SPRINGS
Status:	NFA - No Further Action
Site:	BELL PETROLEUM
Address:	12250 E BELL RANCH RD
City:	SANTA FE SPRINGS
Status:	SIRL - Site Inspection Required Low Priority
Site:	PCP TRANSPORTATION
Address:	12421 E BELL RANCH RD
City:	SANTA FE SPRINGS
Status:	NFA - No Further Action
Site:	INTER COMMUNITY CHLD-GUDN CTR
Address:	8106 S BROADWAY
City:	WHITTIER
Status:	NFA - No Further Action
Site:	PILOT CHEMICAL CO
Address:	11756 BURKE ST
City:	SANTA FE SPRINGS
Map Loc:	7
Status:	SIRH - Site Inspection Required High Priority

Site: PARKER HANNIFIN
Address: 11808 BURKE ST
City: SANTA FE SPRINGS
Map Loc: 9
Status: *NFA - No Further Action*

Site: AERO WHEEL & BRAKE SERVICE
Address: 11927 BURKE ST
City: SANTA FE SPRINGS
Map Loc: 10
Status: *NFA - No Further Action*

Site: CARBONIC PRODUCTS INC
Address: 11950 BURKE ST
City: SANTA FE SPRINGS
Map Loc: 11
Status: *NFA - No Further Action*

Site: WILSON AND GEO MEYER CO
Address: 12805 E BUSCH PL
City: SANTA FE SPRINGS
Status: *NFA - No Further Action*

Site: PACIFIC ASPHALT PRODUCTS
Address: 7829 CHATFIELD
City: WHITTIER
Status: *NFA - No Further Action*

Site: SPORTFILM PROC SPECIALIST
Address: 7906 CHATFIELD
City: WHITTIER
Map Loc: 12
Status: *NFA - No Further Action*

Site: HI-LITE MFG CO
Address: 8515 CHETLE ST
City: SANTA FE SPRINGS
Map Loc: 13
Status: *NFA - No Further Action*

Site: WEST BENT BOLT
Address: 8623 S DICE RD
City: SANTA FE SPRINGS
Map Loc: 14
Status: *SIRL - Site Inspection Required Low Priority*

Site: BURDETT OXYGEN CO OF CALIF (1)
Address: 8832 S DICE RD. & 8838
City: SANTA FE SPRINGS
Map Loc: 15
Status: *PDS - Pending Status*

Site: LIQUID AIR
Address: 8832 S DICE RD
City: SANTA FE SPRINGS
Map Loc: 15
Status: *SIRM - Site Inspection Required Medium Priority*

Site: SCHNER MOREHEAD CHEMICAL
Address: 8835 S DICE RD
City: SANTA FE SPRINGS
Map Loc: 16
Status: *NFA - No Further Action*

Site: SOUTHERN CALIF CHEMICAL CO
Address: 8851 S DICE RD
City: SANTA FE SPRINGS
Map Loc: 18
Status: *PDS - Pending Status*

Site: DIVERSEY WYANDOTTE CORP
Address: 8921 S DICE RD
City: SANTA FE SPRINGS
Map Loc: 19
Status: *SIRH - Site Inspection Required High Priority*

Site: T-CHEM PRODUCTS
Address: 9028 S DICE RD
City: SANTA FE SPRINGS
Map Loc: 20
Status: *NFA - No Further Action*

Site: MOBIL INSPECTION SERVICE INC
Address: 9110 S DICE RD
City: SANTA FE SPRINGS
Map Loc: 21
Status: *NFA - No Further Action*

Site: ELECTRO CHROME CO INC
Address: 9132 S DICE RD
City: SANTA FE SPRINGS
Map Loc: 22
Status: *NFA - No Further Action*

Site:	DICE RD & LOS NIETOS RD DUMP
Address:	9165 S DICE RD
City:	SANTA FE SPRINGS
Map Loc:	23
Status:	<i>NFA - No Further Action</i>
Site:	APRODACA & SONS PLATING
Address:	8018 S FREESTONE
City:	SANTA FE SPRINGS
Map Loc:	24
Status:	<i>NFA - No Further Action</i>
Site:	SANTA FE STEEL TREATING CORP
Address:	9843 S GREENLEAF AVE
City:	SANTA FE SPRINGS
Status:	<i>NFA - No Further Action</i>
Site:	BUTLER CHEMICAL INC
Address:	12132 E LOS NIETOS RD
City:	SANTA FE SPRINGS
Status:	<i>NFA - No Further Action</i>
Site:	FINE LINE PAINT CORP
Address:	12200 E LOS NIETOS RD
City:	SANTA FE SPRINGS
Status:	<i>NFA - No Further Action</i>
Site:	CHEMOCON INC
Address:	12405 E LOS NIETOS RD
City:	SANTA FE SPRINGS
Status:	<i>NFA - No Further Action</i>
Site:	KEENE CORP
Address:	12521 E LOS NIETOS RD
City:	SANTA FE SPRINGS
Status:	<i>NFA - No Further Action</i>
Site:	ST ANTHONY OIL CORP
Address:	12636 E LOS NIETOS RD
City:	SANTA FE SPRINGS
Status:	<i>NFA - No Further Action</i>
Site:	MASTER INDUSTRIAL METALS INC
Address:	12649 E LOS NIETOS RD
City:	SANTA FE SPRINGS
Status:	<i>NFA - No Further Action</i>

Site: TOXO SPRAY DUST CO
Address: 12651 E LOS NIETOS RD
City: SANTA FE SPRINGS
Status: *NFA - No Further Action*

Site: CAMPBELL PATTERN WORKS
Address: 12717 E LOS NIETOS RD
City: SANTA FE SPRINGS
Status: *NFA - No Further Action*

Site: LOS NIETOS DUMP
Address: 12731 E LOS NIETOS RD
City: SANTA FE SPRINGS
Status: *SUPFD - Superfund*

Site: YORK OIL CO
Address: 12830 E MULBERRY
City: WHITTIER
Status: *NFA - No Further Action*

Site: ATLANTIC RICHFIELD (2)
Address: 8118 S NORWALK BLVD
City: SANTA FE SPRINGS
Status: *NFA - No Further Action*

Site: H & H MACHINE CO
Address: 8610 S NORWALK BLVD
City: WHITTIER
Map Loc: 26
Status: *NFA - No Further Action*

Site: RENOX INC
Address: 8639 S NORWALK BLVD
City: SANTA FE SPRINGS
Map Loc: 27
Status: *NFA - No Further Action*

Site: TIDE WATER ASSOCIATED OIL CO
Address: 9018 S NORWALK BLVD
City: WHITTIER
Status: *NFA - No Further Action*

Site: ARMCO NATIONAL PRODUCTION SYST
Address: 9100 S NORWALK BLVD
City: SANTA FE SPRINGS
Status: *NFA - No Further Action*

Site: CROCKETT CONTAINER CORP
Address: 9211 S NORWALK BLVD
City: SANTA FE SPRINGS
Status: *NFA - No Further Action*

Site: SANTA FE AUTO WRECKING
Address: 9310 S NORWALK BLVD
City: SANTA FE SPRINGS
Status: *NFA - No Further Action*

Site: K & V MARINE
Address: 9318 S NORWALK BLVD
City: SANTA FE SPRINGS
Status: *NFA - No Further Action*

Site: WHITTIER PLATING CO INC (1)
Address: 9423 S NORWALK BLVD
City: SANTA FE SPRINGS
Status: *NFA - No Further Action*

Site: L.A. BY-PRODUCTS/NORWALK PIT 2
Address: 9615 S NORWALK BLVD
City: SANTA FE SPRINGS
Status: *REF - Referred to Enforcement*

Site:
Address: 11600 PIKE ST
City: SANTA FE SPRINGS
Status: *NFA - No Further Action*

Site: CALUSA CHEMICAL CO
Address: 11641 E PIKE ST
City: SANTA FE SPRINGS
Status: *NFA - No Further Action*

Site: WHITTIER PLATING CO INC (2)
Address: 11642 E PIKE ST
City: SANTA FE SPRINGS
Status: *NFA - No Further Action*

Site: CAL-TRON PLATING INC
Address: 11919 RIVERA RD
City: SANTA FE SPRINGS
Map Loc: 29
Status: *NFA - No Further Action*

Site: EASTMAN KODAK CO
Address: 12100 RIVERA RD
City: WHITTIER
Map Loc: 30
Status: *NFA - No Further Action*

Site: TRANSDUCERS INC
Address: 12140 RIVERA RD
City: WHITTIER
Map Loc: 31
Status: *NFA - No Further Action*

Site: OIL LINES INC
Address: SANTA FE SPRINGS RD
City: SANTA FE SPRINGS
Status: *NFA - No Further Action*

Site: BARNHART-MORROW CONSTRUCTION
Address: SANTA FE SPRINGS RD
City: SANTA FE SPRINGS
Status: *NFA - No Further Action*

Site: BISHOP OIL CO
Address: SANTA FE SPRINGS RD
City: SANTA FE SPRINGS
Status: *NFA - No Further Action*

Site: ALCAN ALUMINUM CORP
Address: 9315 SANTA FE SPRINGS RD
City: SANTA FE SPRINGS
Status: *NFA - No Further Action*

Site: MATT ENTERPRISES
Address: 9441 SANTA FE SPRINGS RD
City: SANTA FE SPRINGS
Status: *NFA - No Further Action*

Site: PEOPLES DISPOSAL CO
Address: 9525 SANTA FE SPRINGS RD
City: SANTA FE SPRINGS
Status: *NFA - No Further Action*

Site: SANTA FE CASTING CO
Address: 9531 SANTA FE SPRINGS RD
City: SANTA FE SPRINGS
Status: *NFA - No Further Action*

Site:	UNION OIL CO OF CALIF
Address:	9645 SANTA FE SPRINGS RD
City:	SANTA FE SPRINGS
Status:	<i>NFA - No Further Action</i>
Site:	WESTERN GALVANIZING CO
Address:	9719 SANTA FE SPRINGS RD
City:	SANTA FE SPRINGS
Status:	<i>NFA - No Further Action</i>
Site:	MORTON & DOLLEY
Address:	9728 SANTA FE SPRINGS RD
City:	SANTA FE SPRINGS
Status:	<i>NFA - No Further Action</i>
Site:	DIA-LOG CO
Address:	9756 SANTA FE SPRINGS RD
City:	SANTA FE SPRINGS
Status:	<i>NFA - No Further Action</i>
Site:	FOSS PLATING CO
Address:	8140 S SECURA WAY
City:	SANTA FE SPRINGS
Map Loc:	32
Status:	<i>NFA - No Further Action</i>
Site:	LUNA STAIRCASE CO INC
Address:	8206 S SECURA WAY
City:	SANTA FE SPRINGS
Map Loc:	33
Status:	<i>NFA - No Further Action</i>
Site:	LIETZAU PATTERN CO
Address:	8321 S SECURA WAY
City:	SANTA FE SPRINGS
Map Loc:	34
Status:	<i>NFA - No Further Action</i>
Site:	SYSTEM PRENTERS INC
Address:	8332 S SECURA WAY
City:	SANTA FE SPRINGS
Map Loc:	35
Status:	<i>NFA - No Further Action</i>
Site:	SANTA FE ENAMELING FINISHING
Address:	8427 S SECURA WAY
City:	SANTA FE SPRINGS
Map Loc:	36
Status:	<i>NFA - No Further Action</i>

Site: WHOLESALE COPY SERVICE SUPPLY
Address: 11520 E SLAUSON AVE
City: WHITTIER
Map Loc: 39
Status: *NFA - No Further Action*

Site: PINE MOUNTIAN
Address: 11700 E SLAUSON AVE
City: SANTA FE SPRINGS
Map Loc: 40
Status: *NFA - No Further Action*

Site: MORTON CHEMICAL CO
Address: 11733 E SLAUSON AVE
City: SANTA FE SPRINGS
Map Loc: 41
Status: *NFA - No Further Action*

Site: CAL WESTERN PAINTS
Address: 11748 E SLAUSON AVE
City: SANTA FE SPRINGS
Map Loc: 42
Status: *MFA -*

Site: WESTERN SCREW PRODUCTS #1
Address: 11770 E SLAUSON AVE
City: SANTA FE SPRINGS
Map Loc: 43
Status: *PDS - Pending Status*

Site: STUDIO GRAPHICS
Address: 11823 E SLAUSON AVE
City: SANTA FE SPRINGS
Map Loc: 44
Status: *NFA - No Further Action*

Site: TWIN COUNTRIES ELECTROPLATING
Address: 11971 E SLAUSON AVE
City: SANTA FE SPRINGS
Map Loc: 45
Status: *NFA - No Further Action*

Site: SPRINT PRINT INC
Address: 12015 E SLAUSON AVE. #A
City: SANTA FE SPRINGS
Map Loc: 46
Status: *NFA - No Further Action*

Site: SAFE PLATING INC
Address: 12015 E SLAUSON AVE
City: SANTA FE SPRINGS
Map Loc: 46
Status: *NFA - No Further Action*

Site: CHRYSLER CORP
Address: 12206 E SLAUSON AVE
City: SANTA FE SPRINGS
Map Loc: 47
Status: *NFA - No Further Action*

Site: TRI-WAL ENGINEERING
Address: 8200 S SORENSEN AVE, #A
City: WHITTIER
Map Loc: 49
Status: *NFA - No Further Action*

Site: SAME DAY PLATING
Address: 8520 S SORENSEN AVE
City: SANTA FE SPRINGS
Map Loc: 50
Status: *NFA - No Further Action*

Site: ANGELES CHEMICAL CO INC
Address: 8915 S SORENSEN AVE
City: SANTA FE SPRINGS
Map Loc: 51
Status: *NFA - No Further Action*

Site: MCKESSON CHEMICAL CO
Address: 9005 S SORENSEN AVE
City: SANTA FE SPRINGS
Map Loc: 52
Status: *PDS - Pending Status*

Site: E G M CORP
Address: 9211 S SORENSEN AVE
City: SANTA FE SPRINGS
Map Loc: 54
Status: *NFA - No Further Action*

Site: U S GYPSUM CO
Address: 9306 S SORENSEN AVE
City: SANTA FE SPRINGS
Map Loc: 55
Status: *NFA - No Further Action*

Site: ARNOLD PRODUCTS INC
Address: 8220 S SORENSON AVE, #A
City: SANTA FE SPRINGS
Map Loc: 57
Status: *NFA - No Further Action*

Site: PROCESS CHEMICALS CO
Address: 11738 SORENSON LN
City: WHITTIER
Status: *NFA - No Further Action*

Site: WHEELER A F CO
Address: 11712 E WASHINGTON BLVD
City: WHITTIER
Map Loc: 59
Status: *NFA - No Further Action*

Site: EARL SCHEIB OF CALIF
Address: 11764 E WASHINGTON BLVD
City: SANTA FE SPRINGS
Map Loc: 60
Status: *NFA - No Further Action*

Site: RHODRA INC
Address: 11826 E WASHINGTON BLVD
City: WHITTIER
Map Loc: 63
Status: *NFA - No Further Action*

Site: WHITTIER PLATING
Address: 11938 E WASHINGTON BLVD
City: WHITTIER
Map Loc: 64
Status: *NFA - No Further Action*

Site: C P G INDUSTRIES INC
Address: 12200 E WASHINGTON BLVD
City: WHITTIER
Status: *NFA - No Further Action*

Site: TAD REPROGRAPHICS
Address: 12300 E WASHINGTON BLVD
City: WHITTIER
Status: *NFA - No Further Action*

Site: PRESBYTERIAN INTERCOMMUNITY HSP
Address: 12401 E WASHINGTON BLVD
City: WHITTIER
Status: *NFA - No Further Action*

Site: FRED RIPPY INC
Address: 12471 E WASHINGTON BLVD
City: WHITTIER
Status: NFA - No Further Action

Site: WHITTIER CRUDE OIL CO
Address: WELL FIELD
City: SANTA FE SPRINGS
Status: NFA - No Further Action

Site: A-R PRODUCTS INC
Address: 8024 WESTMAN AVE
City: WHITTIER
Map Loc: 66
Status: NFA - No Further Action

Site: MACHINE & TOOLING CO
Address: 8052 S WESTMAN AVE
City: WHITTIER
Map Loc: 67
Status: NFA - No Further Action

CORTESE State of California Office of Planning and Research

This database is a consolidation of information from various sources. It is maintained by the State Office of Planning and Research and lists potential and confirmed hazardous waste or substances sites.

Status Codes: WRCBT Tank leaks. Compiled by Water Resource Control Board.
DHS1 Abandoned hazardous waste site. Compiled by Toxic Substance Control Div. of DHS.
DHS2 Contaminated public water drinking wells serving less than 200 connections. Compiled by Env. Health Div. of DHS.
DHS3 Contaminated public water drinking wells serving more than 200 connections.
DHS5 Sites pursuant to section 25356 of the Health and Safety Code (see BEP)
CWMB Solid waste disposal sites with known migration of hazardous u

Site: BELL PETROLEUM
Address: 12250 E BELL RANCH RD
City: SANTA FE SPRINGS
Status: DHS1 - Abandoned Hazardous Waste Site

Site: WEST BENT BOLT
Address: 8623 S DICE RD
City: SANTA FE SPRINGS
Map Loc: 14
Status: *DHS1 - Abandoned Hazardous Waste Site*

Site: LIQUID AIR
Address: 8832 S DICE RD
City: SANTA FE SPRINGS
Map Loc: 15
Status: *DHS1 - Abandoned Hazardous Waste Site*

Site: DIVERSEY WYANDOTTE CORPORATION
Address: 8921 S DICE RD
City: SANTA FE SPRINGS
Map Loc: 19
Status: *DHS1 - Abandoned Hazardous Waste Site*

Site: VALVOLINE OIL COMPANY
Address: 9520 JOHN ST
City: SANTA FE SPRINGS
Map Loc: 25
Status: *WCRBT - Leaking Tank*

Site: SOUTHERN STEEL & SUPPLY CO. INC
Address: 12350 E LOS NIETOS RD
City: SANTA FE SPRINGS
Status: *WCRBT - Leaking Tank*

Site: TOXICS SPRAY DUST INC.
Address: 12651 E LOS NIETOS RD
City: SANTA FE SPRINGS
Status: *WCRBT - Leaking Tank*

Site: UNION OIL OF CALIFORNIA
Address: 9645 SANTA FE SPRINGS RD
City: SANTA FE SPRINGS
Status: *WCRBT - Leaking Tank*

Site: AGRICULTURAL PROPERTY
Address: SLAUSON AVE
City: WHITTIER
Status: *WCRBT - Leaking Tank*

Site: CIRCLE K CORPORATION
Address: 11462 E SLAUSON AVE
City: SANTA FE SPRINGS
Map Loc: 37
Status: *WCRBT - Leaking Tank*

Site: WESTERN SCREW PRODUCTS #1
Address: 11770 E SLAUSON AVE
City: SANTA FE SPRINGS
Map Loc: 43
Status: *DHS1 - Abandoned Hazardous Waste Site*

Site: LINCOLN INDUSTRIAL CENTER
Address: 12500 E SLAUSON AVE
City: SANTA FE SPRINGS
Status: *WCRBT - Leaking Tank*

Site: MCKESSON CHEMICAL COMPANY
Address: 9005 S SORENSEN AVE
City: SANTA FE SPRINGS
Map Loc: 52
Status: *DHS1 - Abandoned Hazardous Waste Site*

Site: MCKESSON CHEMICAL COMPANY
Address: 9005 S SORENSEN AVE
City: SANTA FE SPRINGS
Map Loc: 52
Status: *DHS5 -*

Site: DAYTON SUPERIOR
Address: 9415 S SORENSEN AVE
City: SANTA FE SPRINGS
Map Loc: 56
Status: *WCRBT - Leaking Tank*

Site: SHELL STATION
Address: 11347 E WASHINGTON BLVD
City: WHITTIER
Status: *WCRBT - Leaking Tank*

LUST(S) Leaking Underground Storage Tanks - California State

The Leaking Underground Storage Tanks Information System is maintained by the State Water Resource Board pursuant to Section 25295 of the Health and Safety Code.

Status Codes:	0	No action
	1	Leak being confirmed
	3A	Prel site assessment workplan submitted
	3B	Prel site assessment underway
	5C	Pollution characterization
	5R	Remediation plan
	7	Remedial action underway

8 Post remedial action monitoring
9 Case closed

Site: VALVOLINE OIL CO
Address: 9520 JOHN ST
City: SANTA FE SPRINGS
Map Loc: 25
Status: 5R - Remediation Plan submitted

Site: SOUTHERN STEEL & SUPPLY
Address: 12350 E LOS NIETOS RD
City: SANTA FE SPRINGS
Status: 5C - Pollution characterization

Site: TOXICS SPRAY DUST INC
Address: 12651 E LOS NIETOS RD
City: SANTA FE SPRINGS
Status: 5C - Pollution characterization

Site: SANTA FE TRUCK TERMINAL
Address: 9750 S NORWALK BLVD
City: SANTA FE SPRINGS
Status: 1 - Leak being confirmed

Site: UNION OIL CO
Address: 9645 SANTA FE SPRINGS RD
City: SANTA FE SPRINGS
Status: 0 - No Action Taken

Site: AGRICULTURAL PROPERTY
Address: SLAUSON AVE
City: WHITTIER
Status: 5C - Pollution characterization

Site: CIRCLE K CORPORATION
Address: 11462 E SLAUSON AVE
City: SANTA FE SPRINGS
Map Loc: 37
Status: 0 - No Action Taken

Site: SHELL SERVICE STATION
Address: 11515 E SLAUSON AVE
City: WHITTIER
Map Loc: 38
Status: 1 - Leak being confirmed

Site: LINCOLN INDUSTRIAL CENTER
Address: 12500 E SLAUSON AVE
City: SANTA FE SPRINGS
Status: 5C - Pollution characterization

Site: PETERSON/PURITAN INC
Address: 9101 S SORENSEN AVE
City: SANTA FE SPRINGS
Map Loc: 53
Status: 9 - Case Closed

Site: DAYTON SUPERIOR
Address: 9415 S SORENSEN AVE
City: SANTA FE SPRINGS
Map Loc: 56
Status: 5C - Pollution characterization

Site: SHELL STATION
Address: 11347 E WASHINGTON BLVD
City: WHITTIER
Status: 1 - Leak being confirmed

SWAT(S) Solid Waste Assessment Test - California State

This program, provided for under the Calderon legislation (Section 13273 of the Water Code), requires that disposal sites with more than 50,000 cubic yards of waste provide sufficient information to the regional water quality control board to determine whether or not the site has discharged hazardous substances which will impact the environment.

Status Codes: Facilities or sites are ranked within each region on a scale 1-15 according to priority.

Site: DICE ROAD
Address: 9165 S DICE RD
City: SANTA FE SPRINGS
Map Loc: 23
Status: Priority Rank 11

Site: PEOPLES DISPOSAL CO
Address: 9525 SANTA FE SPRINGS RD
City: SANTA FE SPRINGS
Status: Priority Rank 12

SWIS Solid Waste Information System

As legislated under the Solid Waste Management and Resource Recovery Act of 1972, the California Waste Management Board maintains lists of certain facilities, i.e. Active solid waste disposal sites, Inactive or Closed solid waste disposal sites and Transfer facilities.

No listings within the specified range.

REGIONAL SOURCES

LUST(R) Leaking Underground Storage Tanks - Regional

Each of the California Regional Water Quality Control Boards RWQCB maintains lists of leaking underground storage tanks.

Status Codes:	0	No action
	1	Leak being confirmed
	3A	Prel site assessment workplan submitted
	3B	Prel site assessment underway
	5C	Pollution characterization
	5R	Remediation plan
	7	Remedial action underway
	8	Post remedial action monitoring
	9	Case closed

Site: FLIGHT TRUCKING
Address: 11770 BURKE ST
City: SANTA FE SPRINGS
Map Loc: 8
Status: 9 - Case Closed

Site: LIQUID AIR CORP.
Address: 8832 S DICE RD
City: SANTA FE SPRINGS
Map Loc: 15
Status: 3B - Prelim Site Assessment underway

Site: VALVOLINE OIL COMPANY
Address: 9520 JOHN ST
City: SANTA FE SPRINGS
Map Loc: 25
Status: 5R - Remediation Plan submitted

Site: AMERICAN MEDICAL ENTERPRISES
Address: 12508 E LAMBERT RD
City: WHITTIER
Status: 3B - Prelim Site Assessment underway

Site: SOUTHERN STEEL & SUPPLY CO. INC
Address: 12350 E LOS NIETOS RD
City: SANTA FE SPRINGS
Status: 8 - Post Remedial Action monitoring

Site: TOXICS SPRAY DUST INC.
Address: 12651 E LOS NIETOS RD
City: SANTA FE SPRINGS
Status: 5C - Pollution characterization

Site: BARRET STATION
Address: 8728 S NORWALK BLVD
City: WHITTIER
Map Loc: 28
Status: 0 - No Action Taken

Site: ACI GLASS PRODUCTS
Address: 9010 S NORWALK BLVD
City: SANTA FE SPRINGS
Status: 0 - No Action Taken

Site: SANTA FE TRUCK TERMINAL
Address: 9750 S NORWALK BLVD
City: SANTA FE SPRINGS
Status: 1 - Leak being confirmed

Site: PFI, INC.
Address: 9215 SANTA FE SPRINGS RD
City: SANTA FE SPRINGS
Status: 9 - Case Closed

Site: UNION OIL OF CALIFORNIA
Address: 9645 SANTA FE SPRINGS RD
City: SANTA FE SPRINGS
Status: 0 - No Action Taken

Site: WESTERN GALVANIZING CORP.
Address: 9719 SANTA FE SPRINGS RD
City: SANTA FE SPRINGS
Status: 0 - No Action Taken

Site:	DIA-LOG CO.
Address:	9756 SANTA FE SPRINGS RD
City:	SANTA FE SPRINGS
Status:	0 - No Action Taken
Site:	SOUTH PACIFIC STEEL
Address:	9835 SANTA FE SPRINGS RD
City:	SANTA FE SPRINGS
Status:	1 - Leak being confirmed
Site:	SOUTH PACIFIC STEEL
Address:	9835 SANTA FE SPRINGS RD
City:	SANTA FE SPRINGS
Status:	7 - Remedial Action underway
Site:	AGRICULTURAL PROPERTY
Address:	SLAUSON AVE
City:	WHITTIER
Status:	5C - Pollution characterization
Site:	CIRCLE K CORPORATION
Address:	11462 E SLAUSON AVE
City:	SANTA FE SPRINGS
Map Loc:	37
Status:	0 - No Action Taken
Site:	PRYOR-GIGGEY COMPANY
Address:	12393 E SLAUSON AVE
City:	WHITTIER
Map Loc:	48
Status:	1 - Leak being confirmed
Site:	LINCOLN INDUSTRIAL CENTER
Address:	12500 E SLAUSON AVE
City:	SANTA FE SPRINGS
Status:	7 - Remedial Action underway
Site:	PETERSON/PURITAN INC
Address:	9101 S SORENSEN AVE
City:	SANTA FE SPRINGS
Map Loc:	53
Status:	9 - Case Closed
Site:	US GYPSUM CO.
Address:	9306 S SORENSEN AVE
City:	SANTA FE SPRINGS
Map Loc:	55
Status:	9 - Case Closed

Site: DAYTON SUPERIOR
Address: 9415 S SORENSEN AVE
City: SANTA FE SPRINGS
Map Loc: 56
Status: 5C - Pollution characterization

Site: SHELL STATION
Address: 11347 E WASHINGTON BLVD
City: WHITTIER
Status: 1 - Leak being confirmed

Site: R.B. PAINT & BODY CENTER
Address: 11508 E WASHINGTON BLVD
City: SANTA FE SPRINGS
Map Loc: 58
Status: 0 - No Action Taken

Site: CALIF TARGET ENTERPRISES
Address: 11770 E WASHINGTON BLVD
City: SANTA FE SPRINGS
Map Loc: 61
Status: 3B - Prelim Site Assessment underway

Site: UNOCAL 76 STATION #5091
Address: 11808 E WASHINGTON BLVD
City: WHITTIER
Map Loc: 62
Status: 9 - Case Closed

Site: SOUTHERN CALIF. EDISON
Address: 11954 E WASHINGTON BLVD
City: SANTA FE SPRINGS
Map Loc: 65
Status: 0 - No Action Taken

TPC

Toxic Pits

The Toxic Pits Clean-Up Act places strict limitations on the discharge of liquid hazardous wastes into surface impoundments, toxic ponds, pits and lagoons. Regional Water Quality Control Boards are required to inspect all surface impoundments annually.

No listings within the specified range.

SWAT(R) Solid Waste Assessment Test - Regional

The Solid Waste Assessment Test Program targets sites where there is a possible risk of hazardous waste escaping from solid waste disposal sites (landfills), threatening both water and air quality. Threatening sites are required to submit water quality Solid Waste Assessment Tests to their Regional Water Quality Control Board. Air quality Solid Waste Assessment Tests are submitted to the local Air Quality Management District or Air Pollution Control District.

Site: DICE ROAD
Address: 9165 S DICE RD
City: SANTA FE SPRINGS
Map Loc: 23
Status: *Priority Rank 11*

Site: WASTE DISPOSAL INC.
Address: 12700 E LOS NIETOS RD
City: SANTA FE SPRINGS
Status: *Priority Rank 4*

Site: SANTA FE SPRINGS SITE
Address: 9615 S NORWALK BLVD
City: SANTA FE SPRINGS
Status: *Priority Rank 3*

Site: PEOPLES DISPOSAL CO
Address: 9625 SANTA FE SPRINGS RD
City: SANTA FE SPRINGS
Status: *Priority Rank 12*

WIP**Well Investigation Program**

The Well Investigation Program (AB1803) identifies groundwater that is already contaminated and empowers the California Department of Health Services and local health officers to order ongoing monitoring programs. The focus of this program is to monitor and protect drinking water.

No listings within the specified range.

11845 BURKE ST. SANTA FE SPRINGS

Page: 27
Job: CLAY0021
Date: 04-01-1991

APPENDIX D

LABORATORY REPORTS



2800 WALNUT AVENUE
LONG BEACH, CALIFORNIA 90801
TEL: (714) 594-0324
FAX: (714) 594-6709

Mabbett, Capaccio & Associates, Inc.
5 Alfred Circle
Bedford, Massachusetts 01730

ATTN: George Olson

August 19, 1991

JOB NO.: 0691044

Page 1 of 12

LABORATORY REPORT

Samples: Twenty-two (22) soils and two (2) water tripblanks from Mabbett, Capaccio & Associates, Inc., received 08/09/91 and analyzed 08/13/91 and 08/15/91. Eleven (11) samples to be analyzed, the remainder to be archived. (7 DAY RUSH ANALYSIS)

Sample ID

EPA 418.1
---mg/kg---

B-1 SS-1	59
B-1 SS-6	ND
B-2 SS-1	4700
B-2 SS-7	ND

Detection Limit	10
-----------------	----

ND = Not Detected

EPA 8010 and EPA 8240 - See attached sheets

David R. Mikesell
Chemist

Lam V. Ho PhD, REP
Laboratory Director

Addendum Report, EPA 8010
Page 2 of 12

Sample I.D.: B-2 SS-1
Date Received: 08/09/91
Date Analyzed: 08/15/91
Matrix: Soil
Project #: 0691044
File #: mabb1.rep

Compound	Result ----ug/kg (ppb)----	D.L.
Benzyl Chloride	ND	30
Bis(2-Chloroethoxy)methane	ND	50
Bis(2-Chloroisopropyl)Ether	ND	30
Bromobenzene	ND	10
Bromomethane	ND	30
Bromodichloromethane	ND	10
Bromoform	ND	30
Carbon Tetrachloride	ND	5
Chlorobenzene	ND	5
Chloroethane	ND	30
2-Chloroethylvinyl Ether	ND	250
Chloroform	ND	10
1-Chlorohexane	ND	5
Chloromethane	ND	30
Chloromethylmethylether	ND	250
2-Chlorotoluene	ND	5
Dibromochloromethane	ND	10
Dibromomethane	ND	20
1,2-Dichlorobenzene	ND	5
1,3-Dichlorobenzene	ND	5
1,4-Dichlorobenzene	ND	5
Dichlorodifluoromethane	ND	200
1,1-Dichloroethane	ND	10
1,2-Dichloroethane	ND	5
1,1-Dichloroethene	ND	10
trans-1,2-Dichloroethene	ND	5
1,2-Dichloropropane	ND	5
cis-1,3-Dichloropropene	ND	30
trans-1,3-Dichloropropene	ND	10
Methylene Chloride	ND	20
1,1,2,2-Tetrachloroethane	ND	5
Tetrachloroethene	92000	5
1,1,1-Trichloroethane	ND	5
1,1,2-Trichloroethane	ND	5
Trichloroethene	ND	5
Trichlorofluoromethane	ND	30
Trichloropropane	ND	5
Vinyl Chloride	ND	20

D.L. = Detection Limit
ND = Not Detected

Addendum Report, EPA 8010
Page 3 of 12

Sample I.D.: B-2 SS-4
Date Received: 08/09/91
Date Analyzed: 08/15/91
Matrix: Soil
Project #: 0691044
File #: mabbl.rep

Compound	Result ----ug/kg (ppb)----	D.L.
Benzyl Chloride	ND	30
Bis(2-Chloroethoxy)methane	ND	50
Bis(2-Chloroisopropyl)Ether	ND	30
Bromobenzene	ND	10
Bromomethane	ND	30
Bromodichloromethane	ND	10
Bromoform	ND	30
Carbon Tetrachloride	ND	5
Chlorobenzene	ND	5
Chloroethane	ND	30
2-Chloroethylvinyl Ether	ND	250
Chloroform	ND	10
1-Chlorohexane	ND	5
Chloromethane	ND	30
Chloromethylmethylether	ND	250
2-Chlorotoluene	ND	5
Dibromochloromethane	ND	10
Dibromomethane	ND	20
1,2-Dichlorobenzene	ND	5
1,3-Dichlorobenzene	ND	5
1,4-Dichlorobenzene	ND	5
Dichlorodifluoromethane	ND	200
1,1-Dichloroethane	ND	10
1,2-Dichloroethane	ND	5
1,1-Dichloroethene	ND	10
trans-1,2-Dichloroethene	ND	5
1,2-Dichloropropane	ND	5
cis-1,3-Dichloropropene	ND	30
trans-1,3-Dichloropropene	ND	10
Methylene Chloride	ND	20
1,1,2,2-Tetrachloroethane	ND	5
Tetrachloroethane	ND	5
1,1,1-Trichloroethane	ND	5
1,1,2-Trichloroethane	ND	5
Trichloroethene	ND	5
Trichlorofluoromethane	ND	30
Trichloropropane	ND	5
Vinyl Chloride	ND	20

D.L. = Detection Limit
ND = Not Detected

Addendum Report, EPA 8010

Page 4 of 12

Sample I.D.: B-2 SS-7
 Date Received: 08/09/91
 Date Analyzed: 08/15/91
 Matrix: Soil
 Project #: 0691044
 File #: mabbl.rep

Compound	Result ----ug/kg (ppb)----	D.L.
Benzyl Chloride	ND	30
Bis(2-Chloroethoxy)methane	ND	50
Bis(2-Chloroisopropyl) Ether	ND	30
Bromobenzene	ND	10
Bromomethane	ND	30
Bromodichloromethane	ND	10
Bromoform	ND	30
Carbon Tetrachloride	ND	5
Chlorobenzene	ND	5
Chloroethane	ND	30
2-Chloroethylvinyl Ether	ND	250
Chloroform	ND	10
1-Chlorohexane	ND	5
Chloromethane	ND	30
Chloromethylmethylether	ND	250
2-Chlorotoluene	ND	5
Dibromochloromethane	ND	10
Dibromomethane	ND	20
1,2-Dichlorobenzene	ND	5
1,3-Dichlorobenzene	ND	5
1,4-Dichlorobenzene	ND	5
Dichlorodifluoromethane	ND	200
1,1-Dichloroethane	ND	10
1,2-Dichloroethane	ND	5
1,1-Dichloroethene	ND	10
trans-1,2-Dichloroethene	ND	5
1,2-Dichloropropane	ND	5
cis-1,3-Dichloropropene	ND	30
trans-1,3-Dichloropropene	ND	10
Methylene Chloride	ND	20
1,1,2,2-Tetrachloroethane	ND	5
Tetrachloroethene	ND	5
1,1,1-Trichloroethane	ND	5
1,1,2-Trichloroethane	ND	5
Trichloroethene	ND	5
Trichlorofluoromethane	ND	30
Trichloropropane	ND	5
Vinyl Chloride	ND	20

D.L. = Detection Limit

ND = Not Detected

Addendum Report, EPA 8240
Page 5 of 12

Sample I.D.: B-1 SS-1
Date Received: 08/09/91
Date Analyzed: 08/15/91
Matrix: Soil
Project #: 0691044
File #: mabb1.rep

CAS #	Compound	Result ----ug/kg (ppb)----	D.L.
67-64-1	Acetone	ND	50
107-02-8	Acrolein	ND	50
107-13-1	Acrylonitrile	ND	50
71-43-2	Benzene	ND	10
75-27-4	Bromodichloromethane	ND	10
75-25-2	Bromoform	ND	10
74-83-9	Bromomethane	ND	30
78-93-3	2-Butanone	ND	50
75-15-0	Carbon Disulfide	ND	10
56-23-5	Carbon Tetrachloride	ND	10
108-90-7	Chlorobenzene	ND	10
124-48-1	Chlorodibromomethane	ND	10
75-00-3	Chloroethane	ND	30
110-75-8	2-Chloroethyl Vinyl Ether	ND	50
67-66-3	Chloroform	ND	10
74-87-3	Chloromethane	ND	30
74-95-3	Dibromomethane	ND	10
110-56-5	1,4-Dichloro-2-butene	ND	10
75-71-8	Dichlorodifluoromethane	ND	10
75-34-3	1,1-Dichloroethane	ND	10
107-06-2	1,2-Dichloroethane	ND	10
75-35-4	1,1-Dichloroethene	ND	10
156-60-5	trans-1,2-Dichloroethene	ND	10
78-87-5	1,2-Dichloropropane	ND	10
10061-01-5	cis-1,3-Dichloropropene	ND	10
10061-02-6	trans-1,3-Dichloropropene	ND	10
64-17-5	Ethanol	ND	10
100-41-4	Ethylbenzene	ND	10
97-63-2	Ethyl Methacrylate	ND	10
591-78-6	2-Hexanone	ND	30
74-88-4	Iodomethane	ND	10
75-09-2	Methylene Chloride	ND	50
108-10-1	4-Methyl-2-Pentanone	ND	30

D.L. = Detection Limit
ND = Not Detected

Addendum Report, EPA 8240 (Cont.)
Page 6 of 12

Sample I.D.: B-1 SS-1
Date Received: 08/09/91
Date Analyzed: 08/15/91
Matrix: Soil
Project #: 0691044
File #: mabbl.rep

CAS #	Compound	Result	D.L.
		----ug/kg (ppb)----	
100-42-5	Styrene	ND	10
79-34-5	1,1,2,2-Tetrachloroethane	ND	10
127-18-4	Tetrachloroethene	200	10
108-88-3	Toluene	ND	10
71-55-6	1,1,1-Trichloroethane	ND	10
79-00-5	1,1,2-Trichloroethane	ND	10
79-01-6	Trichloroethene	ND	10
75-69-4	Trichlorofluoromethane	ND	10
96-18-4	1,2,3-Trichloropropane	ND	10
108-05-4	Vinyl Acetate	ND	10
75-01-4	Vinyl Chloride	ND	30
1330-20-7	m- and p-Xylenes	ND	30
95-47-6	o-Xylene	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10

D.L. = Detection Limit
ND = Not Detected

Addendum Report, EPA 8240
Page 7 of 12

Sample I.D.: B-1 SS-4
Date Received: 08/09/91
Date Analyzed: 08/15/91
Matrix: Soil
Project #: 0691044
File #: mabb1.rep

CAS #	Compound	Result	D.L.
		----ug/kg (ppb)----	
67-64-1	Acetone	ND	50
107-02-8	Acrolein	ND	50
107-13-1	Acrylonitrile	ND	50
71-43-2	Benzene	ND	10
75-27-4	Bromodichloromethane	ND	10
75-25-2	Bromoform	ND	10
74-83-9	Bromomethane	ND	30
78-93-3	2-Butanone	ND	50
75-15-0	Carbon Disulfide	ND	10
56-23-5	Carbon Tetrachloride	ND	10
108-90-7	Chlorobenzene	ND	10
124-48-1	Chlorodibromomethane	ND	10
75-00-3	Chloroethane	ND	30
110-75-8	2-Chloroethyl Vinyl Ether	ND	50
67-66-3	Chloroform	ND	10
74-87-3	Chloromethane	ND	30
74-95-3	Dibromomethane	ND	10
110-56-5	1,4-Dichloro-2-butene	ND	10
75-71-8	Dichlorodifluoromethane	ND	10
75-34-3	1,1-Dichloroethane	ND	10
107-06-2	1,2-Dichloroethane	ND	10
75-35-4	1,1-Dichloroethene	ND	10
156-60-5	trans-1,2-Dichloroethene	ND	10
78-87-5	1,2-Dichloropropane	ND	10
10061-01-5	cis-1,3-Dichloropropene	ND	10
10061-02-6	trans-1,3-Dichloropropene	ND	10
64-17-5	Ethanol	ND	10
100-41-4	Ethylbenzene	ND	10
97-63-2	Ethyl Methacrylate	ND	10
591-78-6	2-Hexanone	ND	30
74-88-4	Iodomethane	ND	10
75-09-2	Methylene Chloride	ND	50
108-10-1	4-Methyl-2-Pentanone	ND	30

D.L. = Detection Limit
ND = Not Detected

Addendum Report, EPA 8240 (Cont.)
Page 8 of 12

Sample I.D.: B-1 SS-4
Date Received: 08/09/91
Date Analyzed: 08/15/91
Matrix: Soil
Project #: 0691044
File #: mabb1.rep

CAS #	Compound	Result	D.L.
		----ug/kg (ppb)----	
100-42-5	Styrene	ND	10
79-34-5	1,1,2,2-Tetrachloroethane	ND	10
127-18-4	Tetrachloroethene	ND	10
108-88-3	Toluene	ND	10
71-55-6	1,1,1-Trichloroethane	ND	10
79-00-5	1,1,2-Trichloroethane	ND	10
79-01-6	Trichloroethene	ND	10
75-69-4	Trichlorofluoromethane	ND	10
96-18-4	1,2,3-Trichloropropane	ND	10
108-05-4	Vinyl Acetate	ND	30
75-01-4	Vinyl Chloride	ND	30
1330-20-7	m- and p-Xylenes	ND	10
95-47-6	o-Xylene	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10

D.L. = Detection Limit
ND = Not Detected

Addendum Report, EPA 8240
Page 9 of 12

Sample I.D.: B-1 SS-6
Date Received: 08/09/91
Date Analyzed: 08/15/91
Matrix: Soil
Project #: 0691044
File #: mabbl.rep

CAS #	Compound	Result ----ug/kg (ppb)----	D.L.
67-64-1	Acetone	ND	50
107-02-8	Acrolein	ND	50
107-13-1	Acrylonitrile	ND	50
71-43-2	Benzene	ND	10
75-27-4	Bromodichloromethane	ND	10
75-25-2	Bromoform	ND	10
74-83-9	Bromomethane	ND	30
78-93-3	2-Butanone	ND	50
75-15-0	Carbon Disulfide	ND	10
56-23-5	Carbon Tetrachloride	ND	10
108-90-7	Chlorobenzene	ND	10
124-48-1	Chlorodibromomethane	ND	10
75-00-3	Chloroethane	ND	30
110-75-8	2-Chloroethyl Vinyl Ether	ND	50
67-66-3	Chloroform	ND	10
74-87-3	Chloromethane	ND	30
74-95-3	Dibromomethane	ND	10
110-56-5	1,4-Dichloro-2-butene	ND	10
75-71-8	Dichlorodifluoromethane	ND	10
75-34-3	1,1-Dichloroethane	ND	10
107-06-2	1,2-Dichloroethane	ND	10
75-35-4	1,1-Dichloroethene	ND	10
156-60-5	trans-1,2-Dichloroethene	ND	10
78-87-5	1,2-Dichloropropane	ND	10
10061-01-5	cis-1,3-Dichloropropene	ND	10
10061-02-6	trans-1,3-Dichloropropene	ND	10
64-17-5	Ethanol	ND	10
100-41-4	Ethylbenzene	ND	10
97-63-2	Ethyl Methacrylate	ND	10
591-78-6	2-Hexanone	ND	30
74-88-4	Iodomethane	ND	10
75-09-2	Methylene Chloride	ND	50
108-10-1	4-Methyl-2-Pentanone	ND	30

D.L. = Detection Limit
ND = Not Detected

Addendum Report, EPA 8240 (Cont.)
Page 10 of 12

Sample I.D.: B-1 SS-6
Date Received: 08/09/91
Date Analyzed: 08/15/91
Matrix: Soil
Project #: 0691044
File #: mabb1.rep

CAS #	Compound	Result ----ug/kg (ppb)----	D.L.
100-42-5	Styrene	ND	10
79-34-5	1,1,2,2-Tetrachloroethane	ND	10
127-18-4	Tetrachloroethene	ND	10
108-88-3	Toluene	ND	10
71-55-6	1,1,1-Trichloroethane	ND	10
79-00-5	1,1,2-Trichloroethane	ND	10
79-01-6	Trichloroethene	ND	10
75-69-4	Trichlorofluoromethane	ND	10
96-18-4	1,2,3-Trichloropropane	ND	10
108-05-4	Vinyl Acetate	ND	30
75-01-4	Vinyl Chloride	ND	30
1330-20-7	m- and p-Xylenes	ND	10
95-47-6	o-Xylene	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10

D.L. = Detection Limit
ND = Not Detected

Addendum Report, EPA 8240
Page 11 of 12

Sample I.D.: Tripblank
Date Received: 08/09/91
Date Analyzed: 08/15/91
Matrix: Soil
Project #: 0691044
File #: mabbl.rep

CAS #	Compound	Result ----ug/kg (ppb) ----	D.L.
67-64-1	Acetone	ND	50
107-02-8	Acrolein	ND	50
107-13-1	Acrylonitrile	ND	50
71-43-2	Benzene	ND	10
75-27-4	Bromodichloromethane	ND	10
75-25-2	Bromoform	ND	10
74-83-9	Bromomethane	ND	30
78-93-3	2-Butanone	ND	50
75-15-0	Carbon Disulfide	ND	10
56-23-5	Carbon Tetrachloride	ND	10
108-90-7	Chlorobenzene	ND	10
124-48-1	Chlorodibromomethane	ND	10
75-00-3	Chloroethane	ND	30
110-75-8	2-Chloroethyl Vinyl Ether	ND	50
67-66-3	Chloroform	ND	10
74-87-3	Chloromethane	ND	30
74-95-3	Dibromomethane	ND	10
110-56-5	1,4-Dichloro-2-butene	ND	10
75-71-8	Dichlorodifluoromethane	ND	10
75-34-3	1,1-Dichloroethane	ND	10
107-06-2	1,2-Dichloroethane	ND	10
75-35-4	1,1-Dichloroethene	ND	10
156-60-5	trans-1,2-Dichloroethene	ND	10
78-87-5	1,2-Dichloropropane	ND	10
10061-01-5	cis-1,3-Dichloropropene	ND	10
10061-02-6	trans-1,3-Dichloropropene	ND	10
64-17-5	Ethanol	ND	10
100-41-4	Ethylbenzene	ND	10
97-63-2	Ethyl Methacrylate	ND	10
591-78-6	2-Hexanone	ND	30
74-88-4	Iodomethane	ND	10
75-09-2	Methylene Chloride	ND	50
108-10-1	4-Methyl-2-Pentanone	ND	30

D.L. = Detection Limit
ND = Not Detected

Addendum Report, EPA 8240 (Cont.)
Page 12 of 12

Sample I.D.: Tripblank
Date Received: 08/09/91
Date Analyzed: 08/15/91
Matrix: Soil
Project #: 0691044
File #: mabbl.rep

CAS #	Compound	Result	D.L.
----ug/kg (ppb) ----			
100-42-5	Styrene	ND	10
79-34-5	1,1,2,2-Tetrachloroethane	ND	10
127-18-4	Tetrachloroethene	ND	10
108-88-3	Toluene	ND	10
71-55-6	1,1,1-Trichloroethane	ND	10
79-00-5	1,1,2-Trichloroethane	ND	10
79-01-6	Trichloroethene	ND	10
75-69-4	Trichlorofluoromethane	ND	10
96-18-4	1,2,3-Trichloropropane	ND	10
108-05-4	Vinyl Acetate	ND	30
75-01-4	Vinyl Chloride	ND	30
1330-20-7	m- and p-Xylenes	ND	10
95-47-6	o-Xylene	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10

D.L. = Detection Limit

ND = Not Detected

Quality Assurance Addendum Report
Page 1 of 2

EPA 8240**Surrogate Spikes**

Lab ID	DCAd ₄	Told ₈	BFB
	-----% Recovery-----		
7024-1	108	107	97
7024-7	107	104	92
7024-5	99	99	87
7024-21	106	101	86
Control Limits	67/117	72/135	59/115
# Outside Limits	0	0	0
% Completion	100	100	100

Matrix Spikes

Lab ID	DCE	TCE	Bz	Tol	ClBz
	-----% Recovery-----				
7024-7 Spk.	115	111	124	102	104
7024-7 Spk. Dup.	110	108	112	101	104
% RSD	4.4	2.7	10	1.0	0
Control Limits	34/215	74/144	58/153	31/139	60/139
# Outside Limits	0	0	0	0	0
% Completeness	100	100	100	100	100

EPA 8010**Surrogate Spikes**

Lab ID	BrClMeth	BrClProp	Cl2Butan
	-----% Recovery-----		
7024-11	72	67	88
7024-14	98	99	92
7024-17	116	114	111
Control limits	44/153	31/149	31/151
# Outside limits	0	0	0
% Completeness	100	100	100

Matrix Spikes

Lab ID	111TCA	TCE	PCE
	-----% Recovery-----		
7009-07 Spk.	113	110	113
7009-07 Spk. Dup.	88	92	89
% RSD	24	20	23
Control limits	46/143	38/150	42/156
# Outside limits	0	0	0
% Completeness	100	100	100

mabet1.qa

Quality Assurance Addendum Report
Page 2 of 2

EPA 418.1

Matrix Spikes

Lab ID	% Recovery
7024-16 Spk.	98
7024-16 Spk. Dup.	102
% RSD	4.0
Control limits	82/129
# Outside limits	0
% Completeness	100

Notes:

Note that Matrix Spikes are not project specific. Therefore, spike information shown on this report may not be from the same project; however, they were analyzed in the same analytical batch.

Definitions:

Spike: A sample from the analytical batch which has been spiked with the parameter(s) of interest at a known concentration.

Spike Duplicate: A duplicate of the spiked sample.

Mean: The average spike recoveries, from both spikes and spike duplicates (or average sample results, for samples run in duplicate rather than spiked).

% RSD: Relative Standard Deviation between a Spike and a Spike Duplicate (or a sample and sample duplicate).
$$\%RSD = [(Spike - Spk. Dup.) / Mean] * 100$$

Control limits are calculated by SCS Analytical Laboratory for internal use from existing spike data. Control limits are found by calculating three standard deviations above and below the mean of the population.

mabet1.qa



280 BRANF AVENUE
CHULA VISTA, CALIFORNIA
619 595-9120
FAX (619) 595-9199

Mabbett, Capaccio & Associates, Inc.
5 Alfred Circle
Bedford, Massachusetts 01730

ATTN: George Olson

August 21, 1991

JOB NO.: 0691044

Page 1 of 11

LABORATORY REPORT

Samples: Four (4) water and one (1) soil sample from Mabbett, Capaccio & Associates, received 08/13/91 and analyzed 08/16/91 and 08/19/91. Reference your project number 91021.02 (7 DAY RUSH ANALYSIS)

Sample ID

EPA 418.1
---mg/L---

MCA-1
MCA-2
MCA-3

ND
ND
ND

Detection Limit

0.5

ND = Not Detected

DO NOT REMOVE

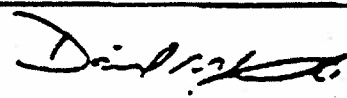
Project No. 91021

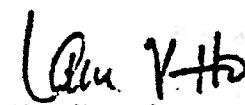
Project Name HT John Craig

DE: _____

CC: _____

EPA 8240 - See attached sheets


David R. Mikesell
Chemist


Lan V. Ho PhD, RPP
Laboratory Director

Addendum Report, EPA 8240
Page 2 of 11

Sample I.D.: MCA-1
Date Received: 08/13/91
Date Analyzed: 08/19/91
Matrix: Water
Project #: 0691044
File #: mabb2.rep

CAS #	Compound	Result ----µg/L(ppb)----	D.L.
67-64-1	Acetone	ND	50
107-02-8	Acrolein	ND	50
107-13-1	Acrylonitrile	ND	50
71-43-2	Benzene	ND	50
75-27-4	Bromodichloromethane	ND	10
75-25-2	Bromoform	ND	10
74-83-9	Bromomethane	ND	10
78-93-3	2-Butanone	ND	30
75-15-0	Carbon Disulfide	ND	50
56-23-5	Carbon Tetrachloride	ND	10
108-90-7	Chlorobenzene	ND	10
124-48-1	Chlorodibromomethane	ND	10
75-00-3	Chloroethane	ND	10
110-75-8	2-Chloroethyl Vinyl Ether	ND	30
67-66-3	Chloroform	ND	50
74-87-3	Chloromethane	ND	10
74-95-3	Dibromomethane	ND	30
110-56-5	1,4-Dichloro-2-butene	ND	10
75-71-8	Dichlorodifluoromethane	ND	10
75-34-3	1,1-Dichloroethane	ND	10
107-06-2	1,2-Dichloroethane	ND	10
75-35-4	1,1-Dichloroethene	ND	10
156-60-5	trans-1,2-Dichloroethene	ND	10
78-87-5	1,2-Dichloropropane	ND	10
10061-01-5	cis-1,3-Dichloropropene	ND	10
10061-02-6	trans-1,3-Dichloropropene	ND	10
64-17-5	Ethanol	ND	10
100-41-4	Ethylbenzene	ND	10
97-63-2	Ethyl Methacrylate	ND	10
591-78-6	2-Hexanone	ND	10
74-88-4	Iodomethane	ND	30
75-09-2	Methylene Chloride	ND	10
108-10-1	4-Methyl-2-Pentanone	ND	50
		ND	30

D.L. = Detection Limit
ND = Not Detected

Addendum Report, EPA 8240 (Cont.)
Page 3 of 11

Sample I.D.: MCA-1
Date Received: 08/13/91
Date Analyzed: 08/19/91
Matrix: Water
Project #: 0691044
File #: mabb2.rep

CAS #	Compound	Result ----µg/L(ppb)----	D.L.
100-42-5	Styrene	ND	10
79-34-5	1,1,2,2-Tetrachloroethane	ND	10
127-18-4	Tetrachloroethene	2200	10
106-88-3	Toluene	ND	10
71-55-6	1,1,1-Trichloroethane	ND	10
79-00-5	1,1,2-Trichloroethane	ND	10
79-01-6	Trichloroethene	100	10
75-69-4	Trichlorofluoromethane	ND	10
96-18-4	1,2,3-Trichloropropane	ND	10
108-05-4	Vinyl Acetate	ND	30
75-01-4	Vinyl Chloride	ND	30
1330-20-7	m- and p-Xylenes	ND	10
95-47-6	o-Xylene	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10

D.L. = Detection Limit

ND = Not Detected

Addendum Report, EPA 8240
Page 4 of 11

Sample I.D.: MCA-2
Date Received: 08/13/91
Date Analyzed: 08/19/91
Matrix: Water
Project #: 0691044
File #: mabb2.rep

CAS #	Compound	Result ----µg/L(ppb)----	D.L.
67-64-1	Acetone	ND	50
107-02-8	Acrolein	ND	50
107-13-1	Acrylonitrile	ND	50
71-43-2	Benzene	ND	10
75-27-4	Bromodichloromethane	ND	10
75-25-2	Bromoform	ND	10
74-83-9	Bromomethane	ND	30
78-93-3	2-Butanone	ND	50
75-15-0	Carbon Disulfide	ND	10
56-23-5	Carbon Tetrachloride	ND	10
108-90-7	Chlorobenzene	ND	10
124-48-1	Chlorodibromomethane	ND	10
75-00-3	Chloroethane	ND	30
110-75-8	2-Chloroethyl Vinyl Ether	ND	50
67-66-3	Chloroform	ND	10
74-87-3	Chloromethane	ND	30
74-95-3	Dibromomethane	ND	10
110-56-5	1,4-Dichloro-2-butene	ND	10
75-71-8	Dichlorodifluoromethane	ND	10
75-34-3	1,1-Dichloroethane	ND	10
107-06-2	1,2-Dichloroethane	ND	10
75-35-4	1,1-Dichloroethene	ND	10
156-60-5	trans-1,2-Dichloroethene	ND	10
78-87-5	1,2-Dichloropropane	ND	10
10061-01-5	cis-1,3-Dichloropropene	ND	10
10061-02-6	trans-1,3-Dichloropropene	ND	10
64-17-5	Ethanol	ND	10
100-41-4	Ethylbenzene	ND	10
97-63-2	Ethyl Methacrylate	ND	10
591-78-6	2-Hexanone	ND	30
74-88-4	Iodomethane	ND	10
75-09-2	Methylene Chloride	ND	50
108-10-1	4-Methyl-2-Pentanone	ND	30

D.L. = Detection Limit
ND = Not Detected

Addendum Report, EPA 8240 (Cont.)
Page 5 of 11

Sample I.D.: MCA-2
Date Received: 08/13/91
Date Analyzed: 08/19/91
Matrix: Water
Project #: 0691044
File #: mabb2.rep

CAS #	Compound	Result ----µg/L(ppb)----	D.L.
100-42-5	Styrene	ND	10
79-34-5	1,1,2,2-Tetrachloroethane	ND	10
127-18-4	Tetrachloroethene	27	10
108-88-3	Toluene	ND	10
71-55-6	1,1,1-Trichloroethane	ND	10
79-00-5	1,1,2-Trichloroethane	ND	10
79-01-6	Trichloroethene	ND	10
75-69-4	Trichlorofluoromethane	ND	10
96-18-4	1,2,3-Trichloropropane	ND	10
108-05-4	Vinyl Acetate	ND	30
75-01-4	Vinyl Chloride	ND	30
1330-20-7	m- and p-Xylenes	ND	10
95-47-6	o-Xylene	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10

D.L. = Detection Limit

ND = Not Detected